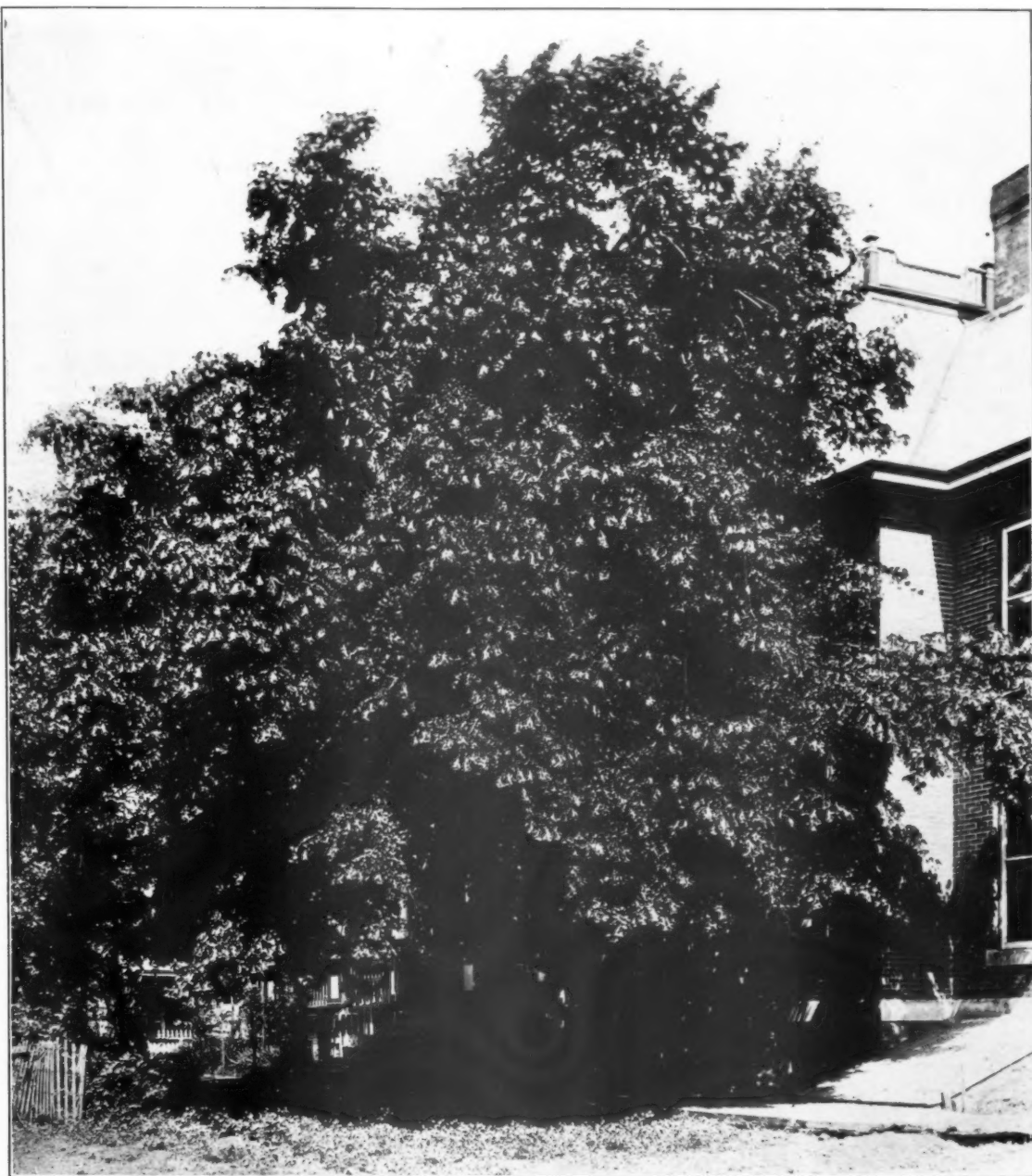


# AMERICAN BEE JOURNAL

AUGUST, 1915

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*A Thirty-one Year Old Basswood*











## American Bee Journal

### Bingham Bee Smokers and Uncapping Knives



**NEW BINGHAM  
BEE SMOKER**  
Patented

Have been on the market nearly 40 years, and are the standard in this and many foreign countries. Insist on the genuine improved articles from your dealer or direct from manufacturers.

Postage extra	ship. wt.	Price
Smoke Engine, 4 inch,	28 oz.	\$1.25
Doctor 3 1/2	26 oz.	.85
Conqueror 3	23 oz.	.75
Little Wonder 2 1/2	16 oz.	.50
Smoke Engine or Doctor in copper spec extra		
Uncapping Knives, improved Cold Handle		
Stan'd Length 8 1/2	20 oz.	.75
Extra long 10	24 oz.	.85
Steam Heated		
3 feet tubing	36 oz.	2.50

**A. G. WOODMAN CO.,**  
Grand Rapids, Mich.

## Wanted

**Choice Grades of  
EXTRACTED HONEY**  
Send Sample and State Quantity  
How packed and the lowest  
price you will take

We are always in the market for  
**Beeswax**, and pay highest market  
prices.

**Hildreth & Segelken**  
265-267 Greenwich St., New York, N. Y.

### CEDAR WOOD

Hive bodies, 8 or 10 frame, 25c each. Covers  
and bottoms, prices upon application. Fal-  
con Foundation and Bee Supplies.

#### FROFALCON QUEENS

Everything for the beekeeper. Address.  
**J. C. Frohlinger, Berkeley, Calif.**  
Greater San Francisco

### LEININGER'S STRAIN OF ITALIANS

Have a record of 30 years. By careful breed-  
ing for 30 years we have succeeded in pro-  
ducing a strain of Italian bees that are un-  
excelled anywhere. Select untested, 80c  
each; 6, \$4.00. Tested, one year old, \$1.00; 6,  
\$5.00. Satisfaction guaranteed.

**FRED LEININGER & SON, Delphos, Ohio**

### BUCKEYE CHAFF HIVES DOVETAILED HIVES

Sections, Comb Foundation  
Choice Northern-Bred Italian Queens

Bees by the pound

General Agents for Root's Goods in Michigan

SEND FOR 1916 CATALOG

**M. H. HUNT & SON**  
Lansing, Mich.

### FRICION-TOP

## PAILS

**GILLE For**  
**MFG. CO. Honey,**  
Dept. B, Syrups,  
Kansas Sorghum,  
City, Mo. Etc., Etc.



# Safety First

We wish to announce that we are breeding exclusively from two **QUEENS** that gave 300 pounds per colony in a 24-day honey flow in 1914 in the wonderful Tupelo region in Florida. The **QUEENS** we are putting on the market we know have no equal for honey production. **NOW** is the time to requeen your yards with this strain and be in shape for the season next year. **OUR QUEENS ARE WORTH MORE THAN WE PRICE THEM, BUT** we are anxious to place this stock on the market. With our years' experience we have never seen such **HONEY** producing stock. Don't think you won't get daughters from this stock, for we are breeding exclusively from these two queens. **OUR DRONES** are selected from our **CHOICEST** colonies and placed in our queen yard. **THESE QUEENS** are very beautiful in color, very gentle, and for **HONEY** production cannot be surpassed. **YOU** will be safe to place your order for this strain. **WE** can take care of any size orders. **PURE MATING, PROMPT DELIVERY, AND SATISFACTION GUARANTEED. EXPORT ORDERS CAREFULLY PACKED.**

#### PRICES AS FOLLOWING:

Untested	-	-	\$1.00	\$5.00	\$9.00	1-Frame Nucleus with queen	-	-	\$2.50
Tested	-	-	1.50	7.50	12.00	2- " " " "	-	-	3.50
Select tested	-	-	2.00	9.00	15.00	3- " " " "	-	-	4.50
One year old breeders from these mothers	-	-				5- " " " "	-	-	5.50
						10- " colonies " "	-	-	9.00
				10.00 each					

**Order Now—Don't Delay**

**The J. E. Marchant Bee & Honey Company**  
**HARTVILLE, OHIO**

# American Bee Journal

## PROTECT YOUR BEES AGAINST FOULBROOD By using "falcon" queens

One of the prominent beekeepers of New York State writes:

"The queens received from you this season have been perfectly satisfactory. For cleaning up foulbrood they cannot be beat. We could not ask for any better queens, and I have not heard any fault found from parties I have sold to."

Can you afford to run the chance of letting foulbrood invade your apiary when "**Falcon**" Italian queens are no more expensive than the ordinary blacks and hybrids which oftentimes cause a catastrophe in an apiary by being so susceptible to foulbrood.

### PRICES OF "FALCON" QUEENS—THREE-BANDED ITALIANS, GOLDEN ITALIAN AND CARNIOLANS

After July 1			After July 1		
Untested.....	1	6	Tested.....	1	6
Select untested.....	1.00	5.50	Select tested.....	2.00	10.00
				12	18
				\$1.50	\$15.00

**SAFE ARRIVAL AND SATISFACTION GUARANTEED**

**DEALERS EVERYWHERE**

**RED CATALOG, Postpaid**

**"Simplified Beekeeping," Postpaid**

**W. T. Falconer Mfg. Co.,**

**Falconer, New York**

*Where the good bee-hives come from*

## GOLDEN ITALIAN QUEENS

Mr. Beekeeper, do you want the best queens that money can buy? If so, try this strain of Golden that for fifteen years has been a leader. All queens reared from superior Golden mothers and mated with select Golden drones; are large, vigorous and prolific; the bees gentle and hustlers, and are noted throughout the United States as a disease-resisting strain. Mated from strong nuclei, three to five full Langstroth frames. No disease. Safe arrival (U. S. and Can.), purity of mating and satisfaction guaranteed. Write for descriptive circular.

### PRICES OF QUEENS

	Nov. 1 to May 1			May 1 to June 1			June 1 to July 1			July 1 to Nov. 1		
	1	6	12	1	6	12	1	6	12	1	6	12
Untested	\$1.50	\$ 7.50	\$13.50	\$1.25	\$ 6.50	\$11.50	\$1.00	\$ 5.00	\$ 9.00	\$ .75	\$ 4.00	\$ 7.50
Select untested	2.00	8.50	15.00	1.50	7.50	13.50	1.25	6.50	12.00	1.00	5.00	9.00
Tested	2.50	13.50	25.00	2.00	10.50	18.50	1.75	9.00	17.00	1.50	8.00	15.00
Select tested	3.00	16.50	30.00	2.75	15.00	27.00	2.50	13.50	25.00	2.00	11.00	18.00

Breeders, \$5.00 to \$25.

**BEN G. DAVIS, Spring Hill, Tennessee**

Please mention Am. Bee Journal when writing.

## CLOSING OUT SALE

—OF—

### BEE BOOKS, VEILS AND SMOKERS

I have some of the following that I would like to close out at once, and on which I make *reduced prices, all postpaid*:

"Langstroth on the Honey-Bee" (Latest edition, \$1.20).....	\$1.00
"Songs of Beedom" (to bee-songs—25c).....	.15
"Honey-Money Stories" (25c).....	.15
Hand's "Beekeeping by 20th Century Methods" (50c).....	.30
Wildner's "Southern Bee-Culture" (50c).....	.35
Danzenbaker Bee-Smoker (\$1.00).....	.80

**GEORGE W. YORK, SANDPOINT, IDAHO**

## ITALIAN NORTHERN QUEENS BRED

Superior winterers, second to none. My free list explains it all. Untested, 75c; select tested, \$1.50. Bees by the pound or half pound. Plans, "How to Introduce Queens," 15 cents; "How to Increase," 15 cents; both, 25 cents.

**E. E. MOTT, GLENWOOD, MICH**

## Get the Atchley Queens

It took 30 years to produce the good qualities obtained in this strain of three banded bees. If you haven't some of this stock in your apiary now, you will have, some day.

Untested, \$1.00 each, or \$10.00 a dozen. After April 15, 75c each, or \$8.00 a dozen. Good tested ones \$1.50 each. I can sell you bees or nuclei cheap; write for prices. Satisfaction of all bees and queens guaranteed.

**Wm. Atchley, Mathis, San Patricio Co., Texas.**

## Miller's Strain Italian Queens

By RETURN mail after June 5th to 10th, or money refunded. Bred from best RED-CLOVER strains in the U. S. In full colonies from my SUPERIOR BREEDERS; northern bred for business; long tongued, three banded, gentle, winter well, hustlers, not inclined to swarm; roll honey in. One untested, 75c; 6, \$1.00; 12, \$7.50. One select untested, \$1.00; 6, \$5.00; 12, \$5.00. A specialist of 18 years' experience. Safe arrival and satisfaction guaranteed.

**I. F. MILLER, Brookville, Pennsylvania**

## CARNIOLANS ONLY

Carniolans build up fast in the spring, are very prolific, VERY GENTLE, cap honey very white, enter comb-honey supers readily, and gather almost no propolis, and are the BEST of honey gatherers. Ten years' experience in honey producing and breeding these bees.

Untested queens, \$1.00 each; dozen, \$ 9.00  
Tested " " " 1.50 " " " 12.00  
1-pound package with queen " " " 2.50  
Ask for our free paper, "Superiority of the Carniolan Bee."

**ALBERT G. HANN, Clinton, New Jersey**



# American Bee Journal

## The "Booster's Club" is Not for "Dead Ones"

You are cordially invited to join the "**BOOSTER'S CLUB**" so that you may assist in a uniform, happy, broad-minded, intelligent and persistent movement to extend the use and push the sale of **honey**. Your own honey first, all honey incidentally.

Our members will advise one another of their successes and failures—plan new uses for honey—devise efficient selling schemes for advertising it, and support them. We will applaud when we like, kick when we feel disposed, suggest what appeals, and all smile together as we gather in the extra **money** dividends that are bound to accrue from the boosting.

The **BOOSTER** will carry this message to every member each month. Every number will feature good and efficient selling schemes. You will want them all. Wrap a quarter in paper and enclose it with your name and address, at our risk, for one year's subscription. \$1.00 for five years.

**GEO. W. WILLIAMS, Redkey, Indiana**

## Quality Hill Queens

"The Queens You'll Eventually Buy"

**Quality Hill Queens** are of a famous strain, greatly improved. All cells are built in 10-frame colonies, brimful of bees, and during a continuous honey flow. For hardiness, gentleness and honey gathering qualities, they are better than most. Four frame nuclei used for mating. Many report them very resistant to European Foulbrood. No disease. Italians.

**Our Guarantee**—All queens will reach you alive, in good condition, purely mated, and will give satisfaction. Queens which prove to be injured in the mails will be replaced if returned. Reference, Plainfield, Ill., State Bank.

	I	6	12		I	6	12
Untested.....	\$ .80	\$4.00	\$7.50	Tested.....	\$1.50	8.00	\$15.00
Select un tested....	1.00	5.00	9.00	Select tested.....	2.50	10.00	18.00

Breeders \$4.00 up

**K. E. HAWKINS, Plainfield, Illinois**

## QUEENS—Golden and Leather-colored

We are in position to fill your orders for queens and bees from date of this "Journal" until October 1, 1915, at following prices:

Prices of one and over	I	6	12
Virgins.....	\$ .50	\$2.75	\$5.00
Untested.....	.85	4.50	8.00
Select untested.....	1.00	5.00	9.00
Warranted.....	1.10	5.50	9.50
Tested.....	1.50	7.50	13.50
Select tested.....	1.75	9.00	15.00
Tested breeding.....	3.00		
Select tested breeding..	5.00		
Ex. select test. breeding	7.50		

1 frame nuclei without queen.....	\$1.50
2 frame nuclei without queen.....	2.75
3 frame nuclei without queen.....	3.50
Colony 8-frame hive without queen.....	7.50
Colony 10-frame Danz, without queen....	9.50
Colony 10-frame hive without queen....	9.50

When queens are wanted with nuclei and colonies, add queens at prices as above for queens.

**Bees by Pound F. O. B. Penn., Miss.**

1/2-pound package, wire cage.....	\$1.00
1 pound package, wire cage.....	1.50
2-pound package, wire cage.....	2.00
No queen supplied at these prices. Make selection and add to above prices.	

Our record last year, about 10,000 queens, and shipments to all important foreign countries; every State in United States and Canada, and only two complaints, which we readily made good. Try us. We are sure to please you.

Our **QUEENS** all around the world. The sun never sets on a Penn Co.'s queen.

**THE PENN COMPANY, Penn, Lowndes County, Mississippi**

Representatives of The A. I. Root Company, and Queen Specialists.

All bees and queens shipped from our yards at Penn, Miss. We have no disease, nor do we know of any diseased bees in this State. Our queens are bred from highly selected stock of uniformly marked bees; for gentleness and working qualities they are unsurpassed; they are world-beaters as honey-gatherers. We consider these queens the equal of any on the market, and years of favorable reports substantiate this claim. In ordering you have the choice of selecting three-banders or goldens. Prompt attention given to all orders and inquiries. Read The A. I. Root Company's endorsement below.

MEDINA, OHIO, February 6, 1914.  
THE PENN Co., Penn, Miss.

Gentlemen:—Replying to yours of February 3, we would state that we have bought a large number of queens of you. We have found them uniformly marked, and of a good stock; in fact, they are first-class in every respect. Another thing, we have always found that you make prompt deliveries, or give us notice promptly when such deliveries could not be made.

THE A. I. ROOT COMPANY,  
Per E. R. Root, Vice-president.



**\$ 2 \$ A MONTH**

buys a Standard Typewriter your choice. Late Style Visible Back Spacer, Tabulator. Two-color Ribbon. Every modern operating convenience. My prices lower than other cash prices. Perfect Machines. Fully guaranteed. Ask for Special.

Five Days Free Trial Offer. **H. A. SMITH**  
230-231 N. 5th Ave., Chicago, Illinois

## Three-Banded Italians

GET THE BEST

Twenty years selection and breeding brings Murry's Queens above the average. Untested, 75c; 6, \$4.00; 12, \$7.50. Tested, one, \$1.00; 6, \$5.00; 12, \$10. Select tested, one, \$1.50; 6, \$8.00; 12, \$15.

**H. D. MURRY, MATHIS, TEXAS**

## Beekeepers' Supplies

Write us for our 64-page catalog. FREE. Full information given to all inquiries. Let us hear from you. We handle the best make of supplies for the beekeeper. Beeswax exchanged for supplies or cash.

**J. NEBEL & SON SUPPLY CO.,**  
High Hill, Montg. Co., Mo.

## QUEENS OF MOORE'S STRAIN OF ITALIANS

PRODUCE WORKERS

That fill the supers quick  
With honey nice and thick.

They have won a world-wide reputation for honey gathering, hardiness, gentleness, etc.

Untested queens, \$1.00; 6, \$5.00; 12, \$9.00.  
Select untested, \$1.25; 6, \$6.00; 12, \$11.00.  
Safe arrival and satisfaction guaranteed. Circular free. I am now filling orders by return mail.

**J. P. MOORE,**  
Queen-breeder Rt. 1, Morgan, Ky.



For sale by all dealers.  
If no dealer, write factory  
**R & E. C. PORTER, MFRS.**  
Lawistown, Ill., U. S. A.

Please mention Am. Bee Journal when writing.



# **Lewis Sections**

## **NOT ONE BAD IN THIRTY THOUSAND**

One of our customers tells that he has put up (folded) thirty thousand Lewis Sections in a season, and not found one section in the whole lot that was not perfect.

**Can we mention any more convincing evidence of QUALITY?**  
**Can you say the same of even five hundred of any other make?**

### **— MATERIAL —**

Lewis Sections are made of Wisconsin Basswood—the best material known for sections. The stock used is first carefully selected by the lumber people, then when it reaches the Lewis factory it is again sorted by the Lewis Inspector' leaving only the whitest material to go into Lewis Sections.

### **— THE V-GROOVE —**

The most difficult part to make right in a section is the V-Groove which allows it to fold up into shape—if it is not cut deep enough or if it is cut too deep, the section will break when folding or will be loose at the corners. The Lewis Section expert has been attending to this part of the work for over thirty years—Lewis sections are perfectly grooved.

### **POLISHING AND DOVETAILING**

Lewis Sections are polished on both sides in a double surface sanding machine, which was designed in the Lewis Plant especially for the purpose. The dovetailing of the ends of Lewis Sections is smooth, clean and just right.

### **— PACKING —**

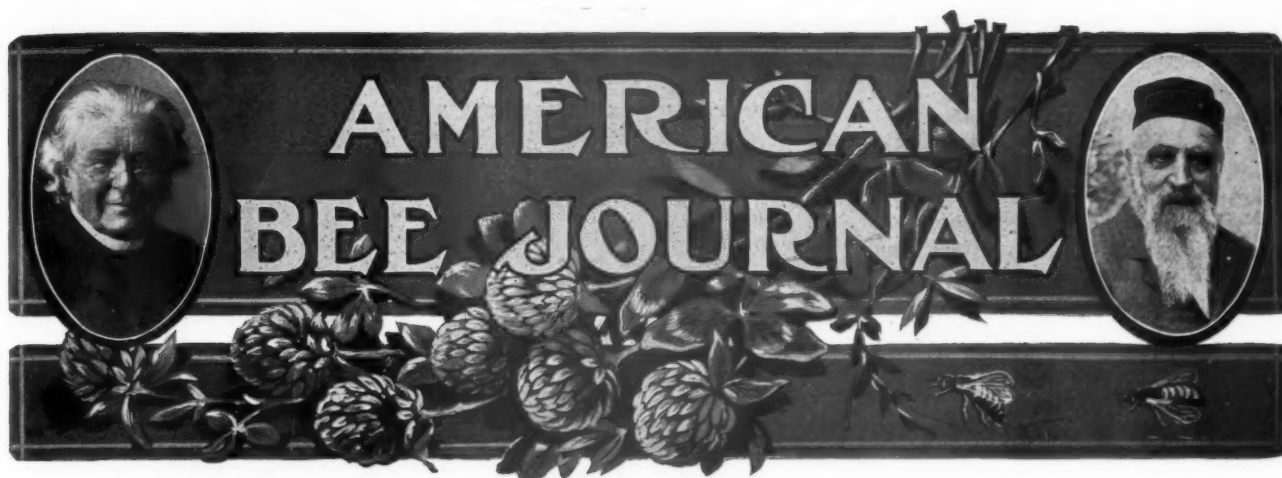
Lewis Sections are packed in a tight wooden box entirely enclosing contents—no discoloration from air or sun can occur, no matter how long they are carried in stock—this package is strongly braced at all corners insuring delivery in good order.

**Insist on Lewis Sections—Look for the Beeware Brand**

## **G. B. LEWIS COMPANY**

**MANUFACTURERS**

**Watertown, - Wisconsin**



(Entered as second-class matter at the Post-office at Hamilton, Ill., under Act of March 3, 1879.)

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C. P. DADANT, Editor.  
DR. C. C. MILLER, Associate Editor.

HAMILTON, ILL., AUGUST, 1915

Vol. LV.—No. 8

## EDITORIAL COMMENTS

### The Front Cover Picture

The picture on our front cover shows that basswood trees may be planted by young beekeepers with expectation of results, both in shade and honey yield. This tree, planted by E. J. Baxter, president of the Illinois State Beekeepers' Association, in front of his home, in 1884, is now 66 inches in circumference at the trunk, and has been for a number of years producing abundant bloom. This summer it was profusely loaded. The Baxter home is surrounded with a number of similar trees.

### Flight of Bees

Did you ever spend time in watching the bees returning to the hives in a thick stream on a day when a honey-flow is on? It's a bit fascinating when you have in mind the thought that every bee that passes means another little drop added to your crop of honey. Another question. Did you ever notice whether the number of outward bound bees was equal to the number inward bound? The writer has opportunity to watch bees where those going north pass between two buildings, condensing the stream. They seem to fly a bit slowly, and not very high, many of them not more than 8 or 10 feet from the ground. But they seem to be all returning, seldom one going. If an occasional bee is seen going, it flies very swiftly. Do the bees, as they leave the hive, fly higher than when returning with their loads, do they fly

around some other way, or do they fly so swiftly that they are not seen?

While watching their flight, one is very likely to ask, "How many trips do they make in a day? How long does it take for a trip? How long does it take for a bee to unload in the hive?" Various estimates have been made in reply to these questions, by no means all alike. Indeed, one would naturally suppose that a trip would take a good deal more time with a sparse yield at a considerable distance than with a heavy yield close by. The time of unloading ought not to vary much. About a year ago an interesting account was given in *Praktischer Wegweiser* of the patient observations of a Mr. Walter. He marked several bees, each a different color: white, yellow, orange, green, blue, and red. With a timepiece and tablet before him, and pencil in hand, patiently he sat beside the hive from 6 o'clock in the morning until 7 in the evening; his meals brought to him, and carefully registered the time of departure and return of each bee. As a result of his observations he reports that a bee makes in a day, not 40 trips, as some have said, nor yet 25, but only 10; that each trip takes from half an hour to two hours, averaging an hour; and that the time spent in the hive between trips is from 5 to 10 minutes.

Probably most beekeepers will prefer to accept his figures rather than to attempt to verify or disprove them by a like watch of 13 long hours beside the hive.

### Obituary

*L'Apicoltore*, in its June number, announces the death of Andrea De Rauschenfels, its former editor, whose autobiography we published in our



THE LATE ANDREA DE RAUSCHENFELS

August, 1913, number. We reproduce the photograph of this eminent apiarist and writer. Besides ably filling the editorial chair of *L'Apicoltore* for 25 years, he published "The Bee and Its Culture," with an atlas of bee anatomy, a reproduction of the lithographic work of Barbo and Clerici.

Mr. De Rauschenfels retired from active life at the end of the year 1912. He died at his home in Noceto, Italy May 21, 1915, aged 87 years.

### More About the Sulla

Since the publication of the article from D. Barone in the June number of the *Bee Journal*, page 199, concerning

## American Bee Journal

this honey plant, we have received, from our good friend A. Cotini, manager of the Federazione Apistica Italiana, of Ancona, some excellent photographs of the "sulla" (*Hedysarum coronarium*) and of the "crocetta" (esparcet or sainfoin, *Onobrychis sativa*), side by side, to show plainly the difference between them. A 2-meter guage shows the height of the plants. As the meter represents 39.37 inches, the sulla shown is about 59 inches high, or nearly 5 feet. The sainfoin is a trifle shorter.

There is, in the Rocky Mountains, from Colorado northward, an American variety of the *Hedysarum*, *H. americanum* or *boreale*. If this plant yields honey, perhaps some of our readers would be able to send us information concerning it.

Our thanks are extended to friend Cotini for his kindly attention in sending the photographs.

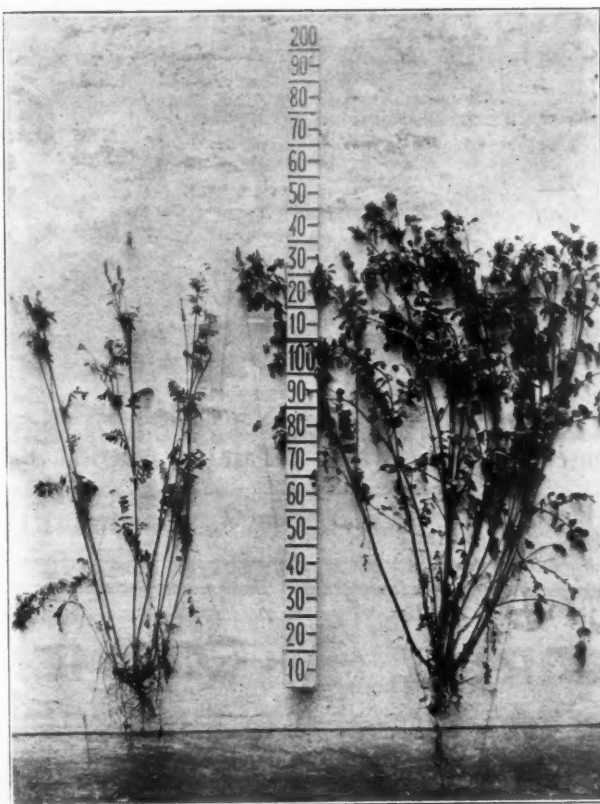
### Italian Bees

The June 10 number of the British Bee Journal contains a long article by Herbert Mace, which is an indictment of the Italian bees. He is not the first writer of England who condemns the Italians, for these bees seem to prove unworthy with our British cousins. Perhaps with them as with the Swiss,

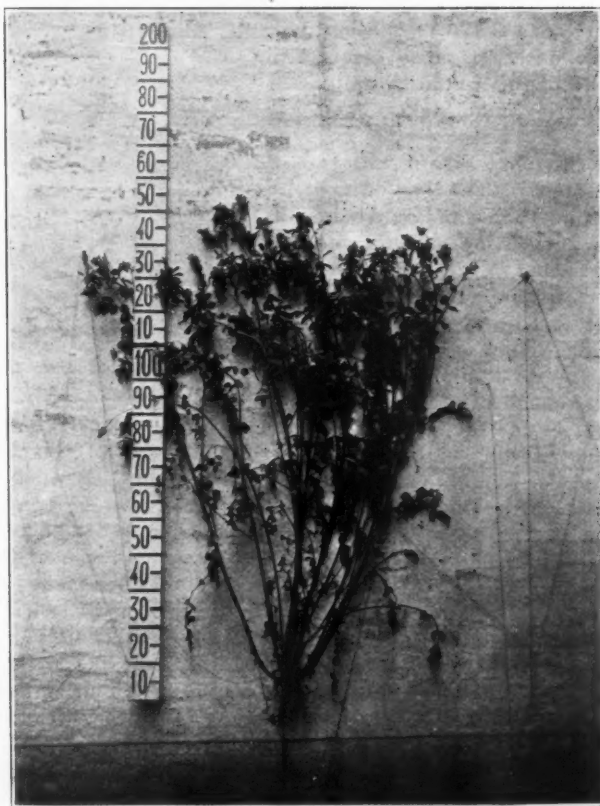
the climate causes the difference. This writer acknowledges some good points

in the Italians, that they work earlier and later in the day than the blacks, for instance. But he at once says that this is a "matter of individual characters." He holds that the Swiss have overwhelmingly found them more subject to foulbrood than the blacks. But he has not taken notice of the fact that the Swiss had not as yet drawn a distinction between European and American foulbrood. It is in the European foulbrood only that the Italians are superior to the blacks. He speaks of their "inveterate devotion to robbing." We believe that this must have been "an individual characteristic" in the colony or colonies which he owned, for in this country wherever a few bees are found lurking around corners, they are almost sure to be blacks, if there are any in the apiary. On the other hand he fails to take notice of the fact that the pure Italian bees defend themselves better than the common bees against robbers and moths.

At the last he recognizes that pure Italians are more amiable than the blacks and also more prolific. To our mind the principal and most weighty argument given against the Italians is the comb-sealing habit of closing the cells with cappings against the honey which gives it a watery appearance. A matter of appearance and no more.



CROCETTA OR SAINFOIN



SULLA

SULLA (*Hedysarum coronarium*)



## American Bee Journal

### Illinois Bee Appropriations

The Legislature has again passed the laws and appropriations for the Illinois State Beekeepers' Association and the inspection of apiaries. Inspector Kildow is continuing the good work and spreading the knowledge necessary to prevent the scattering of foulbrood over the land. Unluckily the first move in this direction was taken much too late. There was a time when foulbrood was practically unknown in Illinois. Had measures been taken, at that time, similar to those we now have, it is quite probable that the new generation of beekeepers would hear no more about foulbrood than we did 40 years ago.

We have also some hopes of seeing a

regular course in beekeeping established at the State University. This would help very much in educating the prospective apiarists. The danger to bee-culture lies with the man who owns bees but knows nothing about them and depends upon the old idea of "luck."

### In the War Zone

In our July number we published a letter from Lieutenant Alin Caillas, in the war zone of France. We have just received from him the two accompanying photos from a French section devastated by the German armies and regained by the French. The first picture represents a damaged apiary partly reorganized by him, the other

the ruins of the church of the little village of Louppy-Le-Chateau in the same locality and in which "not a house is standing." He writes that the soldiers, in their spare moments, help the remaining inhabitants with their crops.

### Honey Values

According to the Department of Agriculture Monthly Crop report for May 10, 1915, the average price of comb honey for the past 3 years has been 13.7 cents per pound. The same report makes the price of extracted honey during the same length of time 11.4 cents. This is only a trifle more than 2 cents per pound extra for comb honey. If this be correct it is more profitable to produce extracted honey, for the cost of production is much less and the amount harvested much more.

### Beekeeping in British Columbia

We have before our eyes Bulletin No. 30 of the Department of Agriculture of this province "Guide to Beekeeping" 2d edition by F. Dundas Todd, our esteemed friend and contributor.

It is a pamphlet of 60 pages, neatly gotten up, which gives the elementary requirements to succeed in the business of beekeeping. White clover, alfalfa and sweet clover appear to be the main honey resources of that region. Owing to the comparative mildness of the climate in winter, the bees are generally wintered outdoors.

### Itinerant School in Beekeeping

The reader will find on another page the announcement of a four day school for beekeepers, under the auspices of the Massachusetts Agricultural College in conjunction with the Essex County Agricultural School. The dates are August 4-7, the place of meeting Hathorne, Mass. The matter is in the hands of our well-known and indefatigable friend, Burton N. Gates, President of the National Association, of Amherst, with the help of Geo. W. Adams, a prominent beekeeper of Essex County; S. I. Davenport instructor in the Essex Co. Agricultural School; Fred. A. Smith, director of the same school and Gladstone H. Cale deputy apiary inspector. All communications regarding this subject should be addressed to F. A. Smith, Hathorne, Mass.

We send our heartiest good wishes to these pioneers.



A DEVASTATED APIARY IN THE WAR ZONE



ALL THERE IS LEFT OF THE CHURCH AT LOUPPY LE CHATEAU

# American Bee Journal

## A Successful Northern Apiarist in Alabama

The "Montgomery Advertiser" of Sunday, June 13, contains a very interesting article concerning Mr. W. D. Null, a former Illinoisan, who, with his seven sons, is making a success of apiculture on a large scale

near Demopolis, Alabama. Mr. Null went to Alabama 6 years ago, bought a run-down farm, improved it, went largely into beekeeping and last year produced nearly 50,000 pounds of sweet clover honey, which he advertises and sells himself successfully. Mr. Null is a hustler and proves it.

tension Service, the Essex County Agricultural School Co-operating.

This school is intended to be of help not only to the professional beekeeper, but to market gardeners, fruit growers, growers of cucumbers under glass, small fruit producers, cranberry culturists, managers of estates and institutions, science teachers, librarians and persons contemplating beekeeping as well.

## MISCELLANEOUS



## NEWS ITEMS

### Tri-State Field Meet at Hamilton

As announced in the June number, page 188, and in the July number, page 247, there will be a field meet at Hamilton, Ill., Sept. 7, followed by a conference of inspectors at Keokuk the next day.

Many noted beekeepers are expected. We can already announce the following: Dr. L. H. Pammel and C. E. Bartholomew, of Ames, Iowa, F. W. L. Sladen, of Canada, F. E. Millen, of Michigan, N. E. France, of Wisconsin, E. R. Root, of Ohio, J. W. Stine, F. Coverdale and Dr. Bonney, of Iowa, Prof. Jager, of Minnesota, E. J. Baxter, Jas. A. Stone and A. L. Kildow, of Illinois, and E. F. Phillips, of Washington, D. C.

FRANK C. PELLETT.

### Minnesota Premiums Open to All

In the July number of the American Bee Journal it is stated that the Minnesota Fair is again making the best

offers of any State Fair in the way of cash premiums. I would like to have your readers know that these premiums are offered to anyone who wishes to exhibit, regardless of where they reside and the Minnesota State Fair Association is glad to send a premium list to anyone interested without charge.

If anybody wants one address Sec. J. C. Simpson, at Hamline, Minn.

Besides having a large honey and bee supply show we expect to have also a meeting of beekeepers on Thursday, Sept. 9th, at 2 p. m. in the Bee and Honey Building at the State Fair. Every beekeeper visiting the Minnesota State Fair should make it a point to be there.

P. J. DOLL, Supt.

Bee & Honey Bldg., Minnesota State Fair.

### Western New York Meeting

The Western New York Honey Producers' Association will hold a picnic and field meet on Saturday, August 7 at the apiary of John N. DeMuth, Pembroke, N. Y., which is on the main State road between Buffalo and Batavia, or 14 miles west of Batavia. Demonstrations and talks on bee-culture will be in order. Bring your basket lunch. Every one interested in bees and honey is invited to attend.

WM. F. VOLLMER, Sec.-Treas.

### Fire Damages Bee Supply Factory

The bee supply factory and store house of Robert G. Coombs of Guilford, Vermont, were damaged by fire, cause unknown, with a loss of about \$15,000 recently, partly covered by insurance.

Mr. Coombs recently took over the business formerly conducted by Earl M. Nichols of Lyonsville, Mass. He expects to keep on filling orders as formerly and will supply his trade with but little delay.

### School for Beekeepers

A school for beekeepers will be held on August 4, 5, 6, 7, 1915, at Hathorne, Mass., under the auspices of Massachusetts Agricultural College, Ex-

### FIRST DAY

August 4, 10 A. M.

- 1 Establishment of Bees in Essex County.—Dr. Burton N. Gates
- 2 1:30 p.m.—Demonstration and explanation of simple beekeeping—equipment; its preparation and use as hives, supers, sections, frames, traps, etc.—Dr. Burton N. Gates, Mr. Gladstone H. Cale.
- 3 Instruction in handling bees (demonstration with live bees)

Dr. Burton N. Gates

### SECOND DAY: FRUIT GROWERS' AND MARKET GARDENERS' DAY

August 5, 10 A. M.

- 4 Demonstration: Maintaining bees in cucumber houses.  
Mr. Gladstone H. Cale
- 5 The Control of the "Moth."  
Dr. Burton N. Gates
- 6 Demonstration of handling bees.  
Mr. Gladstone H. Cale.  
1:30 P. M.
- 7 Necessity for Bees in Vegetable and Fruit Production.  
Mr. S. L. Davenport
- 8 The Orchard Apiary; its Establishment.  
Mr. Gladstone H. Cale.
- 9 Question box.

### THIRD DAY

August 6, 10 A. M.

- 10 The Races of Bees.  
Dr. Burton N. Gates
- 11 The Colony; its Development and Members.  
Mr. Gladstone H. Cale.
- 12 The Products of the Hive.  
Mr. Gladstone H. Cale.  
1:30 P. M.
- 13 Honey Sources; Important Bee Forage.  
Mr. Fred A. Smith.,  
Director.
- 14 Making a Start with Bees.  
Dr. Burton N. Gates

### FOURTH DAY: BEEKEEPERS' DAY—SPECIAL PROGRAM

August 7, 10 A. M.

- 15 Handling of swarms.  
Mr. Gladstone H. Cale.
- 16 Increasing the bees.  
Dr. Burton N. Gates
- 17 Transferring a colony of bees to a modern hive. (Demonstrated)  
Mr. Gladstone H. Cale.
- 18 Discussion of Bee Diseases and Their Treatment. (Demonstrated).  
Mr. Gladstone H. Cale.
- 19 Requeening; Italianization.  
Mr. Geo. W. Adams,  
Rowley, Mass.
- 20 Suggestions for Honey Production.  
Mr. Gladstone H. Cale.
- 21 Question box.



GAETANO PIANA

The apiarist and queen breeder mentioned in the March number; now a Lieutenant in the Italian army

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If the beekeepers have special subjects which they desire discussed or demonstrated, they will please communicate in advance with Mr. Fred A. Smith, Director of the school.

There will be beside bees in glass and other hives, a display of the best and most simple beekeeping equipment.

### Teaching Beekeeping in Y. M. C. A. Schools

In March, 1914, the Y. M. C. A. Schools of Louisville, Ky., prepared and offered a course in Bee Culture. Mr. J. O. Dunkin, B. S., a man of wide experience in Bee Culture, was secured to head the course. In addition, an advisory committee consisting of the most prominent and suc-

cessful bee men in the city was secured to co-operate and advise. The course was started with a free open lecture, admission to which was by signed ticket. Moving pictures relating to the bee industry were also used on this opening night. Nearly 200 people were present at the opening session. Following this a class was formed in which 13 students were enrolled. The course was successful and the students greatly interested. The result was that the bee industry was considerably stimulated throughout the entire community.

This year a similar but somewhat extended course was offered. In addition to the regular lecture lessons offered last year, five practical lessons

conducted in the apiary were added to the course. These lessons were held on Saturday afternoons. This course was again successful though the enrollment was not quite so large as last year.

So far as we know this is the first course in Bee Culture conducted by any Y. M. C. A. in North America. Letters of inquiry regarding the course were received from parties in New York City, El Paso, Texas, and other places asking the Louisville Y. M. C. A. to furnish them with the material presented in the course.

### A Correction

I would like to correct a mistake which appeared (on page 242, July issue) in connection with an article which I sent you. This is a picture of Mr. Pratt's apiary at Wethersfield, Conn.

It would be too bad to let this go by unnoticed because we are indebted to Mr. Pratt for a "good time" when the Connecticut Beekeepers Association met at his home last summer, and I was so well pleased with the appearance of his apiary that I took the picture of it and sent it to you.

A. E. CRANDALL.

Berlin, Conn.

### Texas Branch Association Formed

The Beekeepers of San Patricio County met at the court house on June 26 and formed an association, said association to be known as the San Patricio County Beekeepers' Association. The following officers were elected: President, G. B. Stevens, Sinton; Secretary-treasurer, C. R. Park, Sinton; Directors: B. Merrill, Sinton; Prof. J. L. Allen, Odem; B. M. Caraway, Mathis. Committees on diseases of bees: W. N. McCleary, Sinton; H. D. Murry, Mathis; H. H. Phelps, Odem; Inspector of bees, Wm. Atchley, Mathis.

The meeting adjourned, to meet again on the 25th of September, 1915, at the court house in Sinton, at 1:00 P. M. A full attendance is requested, as matters of importance will come before that meeting.

### Conference of Apiary Instructors in December

After making a canvass of all the Agricultural Colleges in the United States and Canada, Prof. Morley Pettit of Ontario has found that there are about fifteen Colleges giving instruction in Apiculture, and about as many more where they are interested in the subject, and are thinking of putting it in sometime in the near future. A conference of men who are already engaged in giving instruction or conducting experiments in Apicul-



CLASS IN BEE-CULTURE, Y. M. C. A. SCHOOLS, LOUISVILLE, KY., Enrolling business men, lawyers, ministers, piano tuners. First Y. M. C. A. in North America to offer and conduct a course in beekeeping



J. P. MARTINE FIRST KEPT BEES ON THE ROOF OF HIS COAL SHED. Photo by Louisville Y. M. C. A. Schools



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ture in Agricultural Colleges, or are likely to take up that work in the near future is being arranged to be held in conjunction with the meeting of the Association of Economic En-

tomologists at Columbus, Ohio, next Christmas. The purpose of this conference will be to develop and standardize methods of conducting this particular line of work.

## BEE-KEEPING FOR WOMEN

Conducted by MISS EMMA M. WILSON, Marengo, Ill.

### Our Apiary During the Spring of 1915

It may be of some interest to the sisters, especially the beginners, to have some items concerning our apiary. Those who are not beginners may be interested in some things a little out of the usual. Certainly the weather has been, not only a little, but a good deal, out of the usual. And weather means much to the bees.

The fall of 1914 was warm, and the bees were taken into the cellar Dec. 8, although generally they are cellaried in November. Two men took less than 3 hours to carry the 101 in. The blooming of the red or soft maple is usually the signal for taking bees out of cellar. This spring a few blossoms were out March 25, when it immediately turned cold, and they did not come out till April 6, making 119 days confinement. A few dandelions appeared 4 days later.

The colonies were strong, and by April 30, with a little equalizing, each colony had at least 4 frames of brood. Many had 6 or 7. That's better than usual. By that time, either on account of queenlessness, or for some other reason, the 100 had been reduced to 92.

The last week in April was more like June, the thermometer daily standing at 80 to 86. Then it turned the other way, being cold and wet, and by the time June came it was more like April.

After the equalizing, which had less work than usual, the bees received very little attention. Dr. Miller had made up his mind in the winter that no matter what the season, we would not try to see how much honey we could get, but how little work we could do. And he stubbornly stuck to it.

May 11 an upper story with three or four empty combs was put on each hive. That served as a sort of safety-valve; if the bees needed room for either brood or honey they could go up stairs; if they didn't need it they could let it alone. They let it alone. It wasn't the best thing, for it left a great space overhead for the bees to keep warm. It would have been better to have put the empty combs below; but it made less work to put them above, and so that was done.

May 27 the first blossom was seen on white clover, and also on alsike. The rule is that storing on white clov-

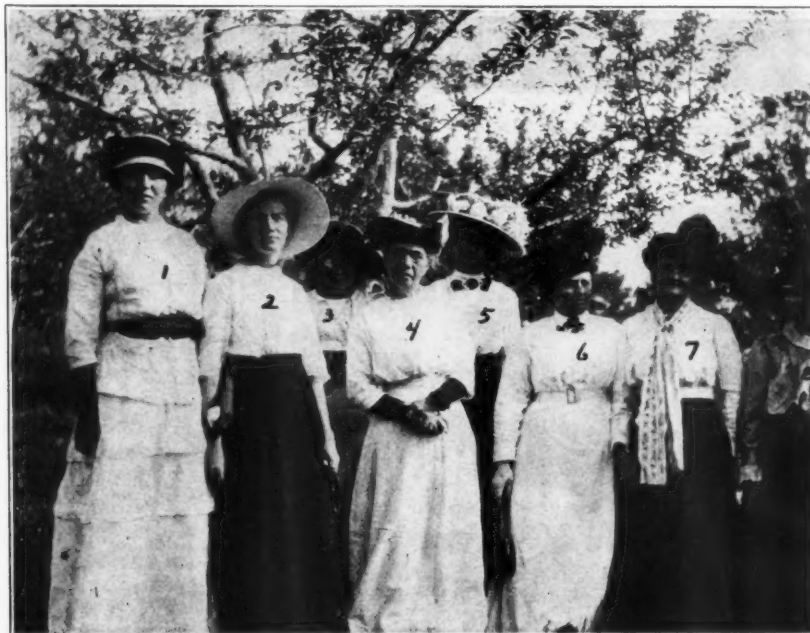
er begins 10 days after the first blossom, so supers were put on. In a few cases a little honey was in these combs, but in no case was there any brood. The strange thing about it was that where a little bit of honey was stored in these upper combs, no honey was found in the brood-chamber, disproving the theory that bees always fill any vacant space in the lower story before storing above. But there is a difference between drawn combs and foundation, and like enough bees always fill the brood-chamber before beginning in the super if the super contains only foundation.

But although clover bloom was abundant, the prevalence of bad weather awakened the suspicion that instead of storing in supers the bees might not be gathering enough for their daily needs. A look into a few hives confirmed the suspicion. Brood-chambers were absolutely destitute of honey. There was the possibility—indeed the hope—that a change would take place within 24 hours, but in less time than that the bees might begin eating brood, so they must be fed at

once, at least a little. So we poured upon the tops of the sections as much heavy syrup as we could without having it run out of the hives. A slouchy way, to be sure, with the chance that it might need repeating in 48 hours; but we did what required least work, and took the chances.

June 21 the bees appeared to be working with frantic eagerness. There was abundance of white clover, and examination showed that bees were also working quite plentifully on alfalfa. Never before had the like been seen. Generally not a bee is found on it, and never more than a very few. No telling why it was so different this year. It may be here explained that the time for cutting alfalfa is when the new growth is started at the bottom an inch or two, without regard to whether bloom is just beginning or is well started. But the weather had hindered the cutting, and when June 21 brought a bright day the mowers started on the alfalfa. On no day since then have the bees seemed to work so hard, although one cannot definitely measure the activity of the bees, and "things are not what they seem" in all cases.

Considering the character of the weather it hardly seemed the bees should think of swarming, and yet two of the neighbors had swarms. So June 21 and 22 we went through the hives looking for queen-cells. A few were found and destroyed. Conditions in the hives were out of the usual. A few colonies had only eggs and sealed brood, showing that for a time the queen had stopped laying. Of course that was a loss. But in most cases the frames were fuller of brood than usual. Indeed it was a remarkable sight. Brood extended clear to the topbar and to the bottom-bar and



The ladies who assured the success of the Cedaridge beekeepers field meeting and picnic:  
1. Mrs. Parker cares for 68 colonies. 2. Miss Julia Schraft owns and cares for 65 colonies. 5. Mrs. J. G. Jewel. 6. Mrs. W. S. Picket. 7. Mrs. Geo. Eckert.

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stranger still, from endbar to endbar, and that in frame after frame, and in hive after hive. In one hive Dr. Miller estimated that there were 6 frames that were seven-eighths filled with brood and the other two frames more than half filled. That would make nearly 50,000 cells of brood.

Such a state of things would not be possible ordinarily, for a larger proportion of each comb would contain stores. But in this case everything gathered was used up as fast as gathered, and so there was no crowding out of brood by stores. Often we have had colonies with more brood, but it would be in more than one story. Probably never before did we have as much brood in a single story of 8 frames.

June 28 the first swarm issued, the latest issuing of the first prime swarm on record in this locality.

June 29 we began looking through the hives for cells the second time. In a number of cases we found the super filled and the bees suffering for room. This happened the more easily because the first super put on each hive was entirely filled with bait sections, nearly fully drawn out. We did a rather wholesale job in the way of adding supers. To most of them we gave 2 apiece, and to a few 3. An empty super was put below the filled

super, and another on top. The one on top acted as a safety valve; if needed the bees could occupy it, and if not needed they could let it alone. An advantage in putting extra supers on top is that if a starter is a bit insecurely fastened, the bees will fasten it if put on top, whereas if put below the weight of the bees will break it down. Besides it makes the work a little easier to have such abundant room, for then such close watching is not necessary.

An inventory July 1 showed there were 7 colonies with one super each, 11 with 2, 69 with 3, and 6 with 4. That figures up 93 colonies, for we had made one new one. That looks like a big lot of super-room if the flow should stop; but there was no great fear of that, for the ground had been so thoroughly filled with water that the clover could not dry up for some time. At any rate, "Nothing ventured, nothing won."

### Worth Living In

One that claims that he knows about it

Tells me the earth is a vale of sin;  
But I and the bees, and the birds, we doubt it,

And think it a world worth living in.

—The Book of Good Cheer.

## FAR WESTERN BEE-KEEPING



Conducted by WESLEY FOSTER, Boulder, Colo.

### Alfalfa and the Honey Flow

Beekeepers watch the alfalfa as closely as, if not closer than the farmers themselves. It is by far the most important honey source in the west. Several conditions in the growing of alfalfa look favorable to the beekeepers.

A number of years ago, complaints began coming in to the Colorado

Agricultural College that alfalfa was not doing as well as formerly; that the stand was running out and a less thrifty growth was being made, consequently the tonnage was falling off. The Colorado Agricultural College began investigations by collecting all the different varieties obtainable. By carrying on these investigations and collections and testing out each variety it was found that the one hun-

dred and eighty varieties divided themselves into two great groups, the northern or hardy, and the southern or less hardy varieties. It was found that the lack of sufficient seed had caused large amounts of the southern varieties to be sown. The result was that the southern varieties winter killed and ran out, from pasturage, to a much greater extent than the hardy northern varieties.

Of all the hardy kinds it was found that the Grimm and Baltic varieties surpassed all the others from the fact that they form the crown below the surface of the ground and are less subject to freezing damage and injury from over-pasturage.

These varieties bloom more profusely and begin blooming before complete growth is made. This makes it possible for the beekeeper to obtain some honey, even though the alfalfa is cut upon making full growth.

Another point in favor of the beekeepers is that the fast multiplying alfalfa meal mills are, to a certain extent, increasing the acreage in alfalfa and they are desirous of obtaining hay with blossoms on—they do not desire the alfalfa cut before it blooms, as a general rule.

### County Agriculturists and Apiary Inspectors

The Apiary Inspection in Colorado is handled in the same general way as is the Horticultural Inspection work. In a number of counties the newly appointed county Agriculturists have been delegated County Horticultural Inspectors, as it seemed feasible for them to do this work on their regular rounds and in connection with their other work.

The counties of LaPlata and Montezuma in southwestern Colorado have, in co-operation with the Colorado Agricultural College and the United States Department of Agriculture, employed Mr. E. D. Smith of Hesperus, Colorado as Agriculturist and he has also been placed in charge of the Horticultural and Apiary Inspection work in these counties.

I understand that the use of Agri-



GROUP OF THOSE PRESENT AT THE DELTA COUNTY FIELD MEET AT CEDAREDGE, COLO.



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cultural College students, specially coached for apiary inspection work has worked well in Ohio and I firmly believe that our County Agriculturists, where they have time for the work, can with a short course of training in inspection service, render valuable assistance in the controlling and eradicating of foulbrood.

Inspection work is largely educational and the police duties of an inspector need not prove irksome to the County Agriculturists.

## Crop Prospects

Bees are nearly one month late in storing honey this year. But in spite of the lateness of the season, honey

is being stored in a good many localities. In the lower Arkansas valley the honey flow began about the first of July while in the northern part of the State the honey flow is at least two weeks later. Some honey came from the first crop of alfalfa in the Arkansas valley while none was secured further north and sweet clover was very late in getting into full bloom.

The crop in Colorado and the west will not be uniformly good, but conditions probably will be very variable. Good crops will be harvested in some places and poor crops in others. With favorable weather and a fast flow, northern Colorado may have a fair crop but conditions still look very unfavorable at this date, July 14th.

been disappointing so far, it has not been nearly so bad as last year, so we have at least that much to be thankful for.

## Two Queens in One Hive

On page 231, July American Bee Journal I mention having two queens in one hive for five weeks. About a week after that item was written the young queen disappeared and the old one is still on the job. I surmise from this, that the young queen had never been mated, having been reared too early in the season. A surprising feature is that the old queen is doing good work yet even if they tried to supersede her in the early spring months, I shall watch the colony, and if queen is not superseded before fall will take the matter in hand, as she is not likely to be good another season. I have an idea that it happens oftener than we are aware of, that two queens are in the hive at once. About two weeks ago I was requeening some marked colonies, and on examining one that showed unmistakable signs of having a failing queen, a search found the old clipped queen and I dispatched her. As I saw no signs of queen cells I considered the colony safe for introducing a young queen, and accordingly gave them one at once. Yesterday I was examining all the colonies requeened to see how queens had been accepted, and the colony in question had killed the young Italian given two weeks ago. Eggs and drone larvae were in the combs and I found that like the colony at home yard with two queens, this one also had raised a virgin that had failed to get mated. Of course they killed the young Italian, for, as a rule, so long as they have anything in the hive they recognize as a queen, bees are very loath to accept another given them.



PART OF PICNIC GROUP AT CEDAREGE, COLO., JUNE 10  
First field meeting held by Delta County Association

## CANADIAN



## BEEDOM~

Conducted by J. L. BYER, Mt. Joy, Ontario.

### Better Than Last Year

The season this year seems to be reversed from the usual order. April gave us real summer weather, the temperature for a few days going as high as 88, while up to date (July 9th) I do not think we have had a single day so hot since that early warm spell. May and June were steadily cool and rather dry. As a result, what little clover we had was very short, and the bees lost many of their field workers during the inclement weather of fruit bloom. When clover opened, many colonies were short of workers, but had lots of brood and

young bees. Naturally surplus from clover is very light here—probably averaging in the neighborhood of 20 pounds per colony. Basswood looks well, and localities that have plenty of trees may get some surplus from this source. At our north location we expect better results from clover if we could only have a bit of good weather, as up there earlier rains caused the clover to last longer than here. Soaking rains lately, at all locations, make good prospects for a crop of late honey in localities that have honey-yielding sources in August and September. While the season has

## Changing Location

Someone has said that for commercial beekeeping, a beekeeper should not tie himself to any particular locality, but should have things in shape to move whole outfits easily from time to time as conditions call for. While many will not agree yet it is a fact that localities are constantly changing. For instance, when I first started beekeeping, we used to move bees in August some distance north to get buckwheat honey. Now these localities grow little buckwheat. At the Cashel apiary where I well remember going one day a few years ago, on a bicycle to see where the bees were getting buckwheat honey—the first ever noticed at that yard, today more buckwheat is sown than at any of our other locations. How long this will last I do not know, but as they grow buckwheat now as a soil cleaner, likely much will be grown for some time to come. Our home district has been one of the pioneer sections for growing alsike for seed, my grandfather being one of the first men in



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Ontario to grow it extensively. With the growth of the City of Toronto, and the bulk of the farmers producing milk and other food products for the city people, alsike growing is falling off each year, and we have not nearly as good a honey location as in the past. Certainly if just starting again I would not choose our present locality to keep bees for a living, but with a home established and home ties formed, it is quite a problem for a man in middle years with a family, to pull up and form new connections. If money was everything, such moves might be in order, but I doubt the wisdom of people in conditions I have described, making such a radical move.

### Requeening This Summer or Fall

Owing to very poor season last year, very little requeening was done by myself or the bees, and as a result the majority of the colonies have queens two years old. This condition

no doubt applies to many places in Ontario. The safest thing to do is to try and get rid of a lot of these queens before winter or we will have a lot of superseding or queenless colonies next spring. I have done a little of this work already, but as we look for a long period of buckwheat bloom, we hope to do more of it later on. Granted that just as good queens can be reared or bought in August as in earlier months, buckwheat bloom is the very best time to requeen colonies. Not the risk that there is in dequeening a colony in clover bloom, and the August queens will give the very best service next spring.

**Protest Answered.**—"Hang it, Jones, I've just been stung by one of your confounded bees! I demand reparation!"

"Certainly, Bilson. You just show me which bee it was and I'll punish the horrid thing severely!"—Philadelphia Evening Ledger.

## BEE-KEEPING IN DIXIE~

Conducted by J. J. WILDER, Cordele, Ga

### Weak Colonies

We have never heard so much complaint from beekeepers about weak colonies and never have had quite so many in our own apiaries as we have had this spring. In many cases it has been puzzling to know just how to advise to build them up for the bees seemed to go backwards rather than forward at a time when they should have been in good shape.

It is noticeable, though, that this general condition prevailed where the Italian stock was in use and such was the case with us. Usually we could

hasten brood rearing but this season we failed and do not know why. The bees had plenty of stores and most of the time there was some nectar and pollen coming in and the queens were laying but would not spread brood in the usual manner. Then all at once they were swarming out leaving their brood and stores and hanging about on limbs of trees near the apiaries. Sometimes there would be from 15 to 20 of these small swarms or clusters in a single apiary.

We would return them but they would come right out again and noth-

ing we could do would make them contented.

Changing the combs around, uniting, and feeding did not give results. Clipping queens' wings or confining them to their hives by entrance guards was of no avail as they would ball their queens or unite with some other swarm already out. We called them "Suicides" and wondered what would be the result. Of course the result was a good reduction in the number of colonies and a very light harvest.

As soon as we could get to it, we went to requeening with Caucasian stock with good results.

There are thousands of colonies all over Dixie that have not altered this poor condition yet and requeening is the very best thing to resort to in order to assure good wintering and best results next season. At this season of the year if a queen is not making a good showing it is a sure sign that she is failing and to try to carry her over until next season would result in a loss.

So it is the very best time to look after this work. There is no question but that it will pay in the long run and if you are not pleased with your stock by all means try some new blood or another kind of bees.

### Eight or Ten Frame Hive

Our leading bee supply manufacturers have brought about no little discontent among beekeepers of the South of late by boosting the ten-frame hive and not making the South an exception in favor of the eight-frame hive. This is due to the fact that they are not so familiar with the conditions here as they are with the North where the larger hive is better. So often those who have the eight-frame hive are not contented with it, since a larger size is so strongly advocated and they are led to believe the eight-frame hive is too small for best results.

The beginner believes he will be a back number in a few years and will have many regrets or make a failure if he doesn't start in with the ten-frame size. There can be no doubt that for general purposes the eight-frame size is the best for Dixie and that the ten-frame size is entirely too large, except in very few locations where extracted honey is produced exclusively. The ten-frame size allows too much storing and hanging out room below the supers in order to obtain best results in honey production and this reason alone condemns it for our use.

### The Honey Market

There seems to be regret among the beekeepers over the dullness of the honey market this season. There is a very light crop in Dixie, and it would seem that the beekeepers could find a market promptly and without much trouble for their very small output, but this does not seem to be the



A SOUTHERN MOUNTAINEER APIARY NEAR CHATTANOOGA, TENN.  
Photograph by R. O. Dickson

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case and lots of honey producers don't know, even at this late date what they will do with their honey. It took but little to supply their old customers and to look up good and reliable new ones is rather a hard task, for many merchants and firms are going out of business, and are crying hard times, and will not settle their accounts with anything like promptness or satisfaction. These conditions seem to prevail in Dixie with no hope for better conditions.

Where the output is not too great, it might be best to resort to a more general development of the home or nearby market. In Dixie the average beekeeper has hitherto shamefully neglected his home market, depending solely on a far away market which is not always the best and the most satisfactory. This might be a good time to surprise yourself as to how much better satisfaction you can get by placing your honey near home. Of course the larger producer cannot do this for the greater part of his crop must go into the hands of dealers who are in position to sell large quantities.

When you find out that the wholesalers are reliable and prompt in settling, get together on a price and if they cannot take your entire crop ship them what they say they can handle on thirty and sixty days time. But in order to get their trade, you have to have the honey packed attractively for the retail trade and well repacked in cases and crates for the jobbers and wholesalers. They will not take it poorly put up, but if well prepared for the trade nearly every firm will take it and there will be no trouble in making sales and general satisfaction will be the result.

### When Does Beekeeping Pay?

A clear insight and determination generally result in success in any line of business. But to make it a shining success it must be made a hobby and **ridden**, with the emphasis placed on the ride.

Beekeeping is a hobby in nearly everyone's hands but the great trouble is that it is not "ridden." There are not many apiaries that have the attention and consideration they should have. It is not astonishing that so few people are making money in our line of business. I believe the time is at hand when beekeepers ought to awaken to the fact that they are not doing their best and that on account of this there are not more money makers in our ranks.

I visited a beekeeper once, who had only one apiary of about 90 colonies, but around each hive was a well trodden path, and he was there at work just as if he was rushed. As it was at a slack time in the general apiary work I asked, "What do you do here so much?" and his reply was simply "Riding my hobby daily."

Some time after this I met a traveling man who was representing some



MR. GEO. ECKERT DEMONSTRATING WATER TREATMENT FOR FOULBROOD AT CEDAREGE FIELD MEET

manufacturing concern and working on commission and he told me that he had been a beekeeper for more than 20 years but he had not been contented and had moved about considerably and had finally gotten into a very poor location and had to sell his bees and quit beekeeping. He was not contented with his present job and was going back into beekeeping again as soon as he could. I asked him where it was he previously "stuck." It developed that he had sold out to the energetic beekeeper mentioned

above.

A few years later I again had occasion to spend a few hours with this energetic beekeeper. At this time, instead of 90 colonies in this yard there were 200, and instead of the crude honey-house, there was erected one of the most modern honey-houses, and two out-yards of 150 colonies each had been established besides.

He also had a good bank account and I learned that all the improvements and increase he had made were with the start of 90 colonies.

## NOTES FROM ABROAD

By C. P. DADANT. (Concluded.)

Paris is the universal city, the city that every traveler in Europe visits, in which there is so much of art to be seen. We were there ten days in July; we remained nine days longer in Octo-

ber. With the bewitching daughters of our friend and correspondent in Paris, Mr. Gariel, we visited the Louvre, the opera, etc. To enjoy Paris fully, nothing equals the company of charm-



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ing Parisian ladies.

Although our visits to the apiaries of Europe were at an end, we still had occasion to meet beekeepers. Mr. Etienne Giraud, of Le Landreau, who, with his father, wrote a small book describing the Doolittle queen-rearing method, and who made a great success of the artificial cell-cup system as far back as the year 1899, did us the honor to come to Paris, purposely to meet us. We spent a couple of days together and visited several persons of note in the bee world.

We made a visit to the Pasteur Institute, the greatest bacteriological station in the world. The reader will remember that we had been invited to come there, by Dr. Melikoff, whom we met at the Bertrand home, in Switzerland. He had begun studies of foulbrood, but having no fresh samples from which to work, his experiments were hampered.

The cultures shown to me under the microscope resembled exactly those of Barbo, made in the seventies. They had not yet isolated the bacilli. The Pasteur Institute has such a variety of subjects on its hands that the study of bee diseases can only be a side issue. Their original work was the study and inoculation of hydrophobia; from that they have branched to most of the diseases of the human race and of the domestic animals. We cannot expect from them as much attention to bee diseases as our own government is giving to this branch of agriculture. Our Dr. White, who has so clearly demonstrated the differences existing between the two foulbroods, American and European, will probably remain the head scientist on bee diseases, for years to come.

We called upon Mr. Alin Caillas, the honey analyst who is now serving his country as lieutenant. His father, who was still living at the time of our visit, was secretary of the International Congress of beekeepers in 1900.

We called upon Mr. Bondonneau, the former editor of "L'Apiculture Nouvelle," and were also invited for an evening by its present editor, Mr. Condamin. By the way, this magazine has suspended its publication since July, 1914; its publisher is an officer at the front, in the terrible war now raging.

We had the great pleasure of meeting the Foloppe brothers, two young men, whose interesting studies of combs built on different weights of foundation were published in the American Bee Journal in May and June, 1911. By coloring a lot of beeswax and afterwards making it into comb foundation they ascertained that when the bees manipulate the foundation they carry a part of the wax outward, using new wax as needed, so that the coloring matter contained in the foundation was carried out even to the cappings. They also experimented upon large worker cells, about which so much was said in the European bee journals some years ago. It has been held that by making foundation with larger cells—764 cells instead of 838 to the square decimeter, larger bees could be secured.

This assertion, made by the irate Abbé Pincot, in "L'Apiculteur," has not been sustained, and the general

consensus of opinion, as well as the conclusion of the Foloppe brothers, is that it is best to follow nature as closely as possible.

Before leaving the field of European bee culture, I should not fail to mention also meeting, at the office of Mr. Condamin, the former president of the Algerian Beekeepers' Association, the enthusiastic Mr. Bernard. This gentleman, whose occupation is that of an inspector on the Algerian national railroads, was an acquaintance of long standing, although I had never met him. He is a fervent admirer of the American methods of beekeeping and has done a great deal of pioneer work in the uncultured villages of the Arabs of North Africa. Needless to say that our meeting was pleasant.

My reader, by this time, must wonder whether there was no unpleasant feature to our visits, whether we found everything agreeable and cheerful everywhere. I believe I have mentioned everything that happened. I recall only one instance when I had occasion to mistrust a brother beekeeper during the entire four months. It was when I received a letter from a beekeeper on the Spanish border, in southern France, offering me "an important apiarian transaction" to the amount of 100,000 francs, or \$20,000. The party in question had read of my travels and thought to lure me with the possible sale of 500 colonies of bees to be shipped by me from America to a friend of his. I was to come and see him and make the arrangements for this sale. A transaction of this kind looked very suspicious to me, and instead of getting warmed up and losing my head over the prospect of making a profit that would more than cover my expenses for the European trip, I wrote to one of the most active dealers in bee supplies in

Europe, enquiring whether he knew anything about this party. The reply was overwhelming. The same parties had made purchases from him to the amount of several hundred dollars which had never been paid. Difficult as it may have been, they had managed to keep out of the claws of justice. So he did not appear to have any recourse for his losses. He called them "a black gang."

So you see, dear readers, that the swindlers are not all in America, there are some on the other side of the ocean, who perhaps will read these lines and see their picture in them just as clearly as in a photograph. Luckily they are scarce.

And now, that we have left the shores of Europe, at the end of this long trip, and look back, we can hear the roar of cannon, see the smoke of burning homes, watch the endless string of homeless widows and orphans, all this within a year. Unsuspicious Belgium is a ruin, owing to too much confidence in the honesty of neighbors. Dozens of our friends have seen their sons depart, never to return. Pretty, delightful Grandpré, described, with photos, in our Journal of January, 1914, is a ruin, and my wife's cousins have been driven away from their birthplace. Even peace-loving Switzerland has had to arm and watch the frontier at great expense. Every one of those nations is a vast hospital. Glory! did you say? No, Shame, Shame upon you emperors who attempt to make for yourselves a name, written in oceans of blood! Hail Columbia! Happy land where no conqueror can dictate to the nation what course it shall pursue!

Let us hope that war in the end will conquer militarism and establish a PEACE era, with universal disarmament!

## CONTRIBUTED



## ARTICLES

### Bee Hunting—Saving the Bees

BY L. B. SMITH.

I HAVE seen some discussions in the journals and several farm papers about hunting wild bees, cutting the trees, saving the bees, etc. I believe the writers, with the exception of Elias Fox, of Union Center, Wis. (see Gleanings in Bee Culture for Jan. 1, 1915, page 32), agree that such work is not profitable. As I have had perhaps as much experience along that line as any living man of my age, I should like to count trees with the veteran bee hunter, Mr. Fox. I have found as many as 30 and 40 bee-trees in a single season. I do not hunt them for profit, but for pastime, as a sportsman would hunt wild game, for after the tree is found, bees captured, etc., we consider the "fun" over, for in many cases we give the bees and contents of the tree to the owner of the land or some nearby neighbor, after hiving the bees for them. Like our brother bee-hunter,

Mr. Fox, we always save the bees when possible.

We have often walked and carried the bees 4 and 5 miles on our shoulders in the mountains or other inaccessible places to horse and buggy. We always save all the brood and straight worker comb, and believe it pays us to do so. We have many hundreds of nice worker combs in our bee-yards, some of which have been in constant use for over 26 years, that were taken from bee-trees, and we still add to them each season.

My two sons and I own upwards of 500 colonies of bees, and more than two-thirds of these have been taken from bee-trees, caves, etc., in the woods. We do most of our bee hunting in late fall and winter. We select this time because we have more leisure and the bees are more easily "baited" when there is nothing in the fields and pastures for them to gather. We cut the tree and hive the bees at any season of the year, preferring a warm day in the winter months, as they have little or no brood then, and



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we can take our time transferring the combs into frames.

We use a light box (often a paper box) for "hiving." After we have the bees in the box it is then slipped into a large grain sack and tied. The combs are sorted into three grades; all the "eatable" honey into one; the small

scraps of empty comb and drone comb go into the wax press; such comb as is suitable to transfer makes up the third class. All are then loaded into the wagon or buggy and taken home or to the nearest out-apiary, the bees placed on drawn combs with sufficient honey in them to last until they can be

self-supporting. We have frequently had such colonies gather from 150 to 200 pounds of surplus extracted honey the following season.

Of course, we work to keep down swarming, and try to have all colonies strong, and give them every attention that any up-to-date apiarist would give. We took over 30 tons of honey in 1913, and over 40 tons in 1914, and are going to try to beat that in 1915.

We owe much of our success in apiculture to the American Bee Journal, of which I have been a constant reader for over 30 years.

Llano, Tex.

### A Perfect Food

BY L. E. KERR.

**A** FEW years ago the people asked for and obtained pure food laws.

Now that we have them, the remaining question is to decide which articles are most suited as ordinary necessities. Fortunately, research is gathering much headway, not by financially interested concerns, but by those determined, for their own good, to get to facts. In these agitations lies a promise, to honey producers, of illimitable good.

It is a live issue, and the dailies, magazines, agricultural and trade periodicals, that are carrying the work forward, are deserving of the highest praise.

The more honey and natural food  
s,



AN APIARY OF L. B. SMITH IN TEXAS



L. B. SMITH IN HIS APIARY AT LLANO, TEX.—These bees were caught in the woods at various times

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such as fruit, nuts and vegetables, are investigated by the thinking public, the better for all concerned. Prepared victuals are generally the equal of those mother earth provides only in keeping qualities, and rarely in nutrition or wholesomeness.

It is a demonstrated fact that, while manufactured sugars in digesting deplete the system of lime, bringing as a least penalty interrupted growth and prematurely decayed teeth and probably such dreaded afflictions as tuberculosis, honey and fruit sugars, on the other hand, are a certain relief.

Yet honey is not a medicine any more than a ripe apple. It prevents rather than cures disease, as any other wholesome, natural food will. It can cure only by providing the system with vital force wherewith to successfully combat deadly elements. Few medicines do this, but only stimulate acquired energy. Honey is not stimulating, but soothing.

Originally we were given through the heated season such light foods as vegetables and fruit. For winter the richer, more sustaining nuts and grains, or protein. Honey, an original

sweet in sealed waxen cells, is intended for use at all seasons.

In food matters, there is no truer science than actual test, and the writer begs to go on record as solemnly asserting that never was health and strength more perfect than when eating regularly and generously the product of the hive. Were we to accept as fact the consensus of opinion regarding it, the conclusion might be that honey is more of a luxury than a staple commodity. Excepting those who have studied its nutritive qualities, few would concede that a pound of it will produce more energy than a pound of butter, a dozen eggs, or a peck of potatoes.

This is not at all strange considering that honey has been neglected compared to artificial foodstuff. Honey never was intended to replace such foods as the potato; in contrast, though, it is of infinitely richer quality.

As a Providential and ideally perfect food I accept as choicest the unalloyed nectar of flowers in comb or liquid. Ill-health is the penalty for violated laws of nature. Perfect health will have the right-of-way when we

have learned to live rightly.  
Ft. Smith, Ark.

## Securing Bee Disease Legislation

BY GEORGE W. YORK.

**E**XPERIENCE is a great teacher. I had some of the "real thing" the past winter while a member of the Idaho State Legislature. It was my privilege to introduce in the House of Representatives the bill providing for the control and eradication of foulbrood in the apiaries of Idaho, and also to prevent the importation or exportation of the disease. It was a stringent law, and had it been approved and signed by the Governor it would doubtless have proven one of the very best laws in the interest of successful beekeeping in the United States. But the Governor vetoed the bill, and so all the work that was put upon it in both the House and the Senate, and also by the beekeepers themselves, was wasted.

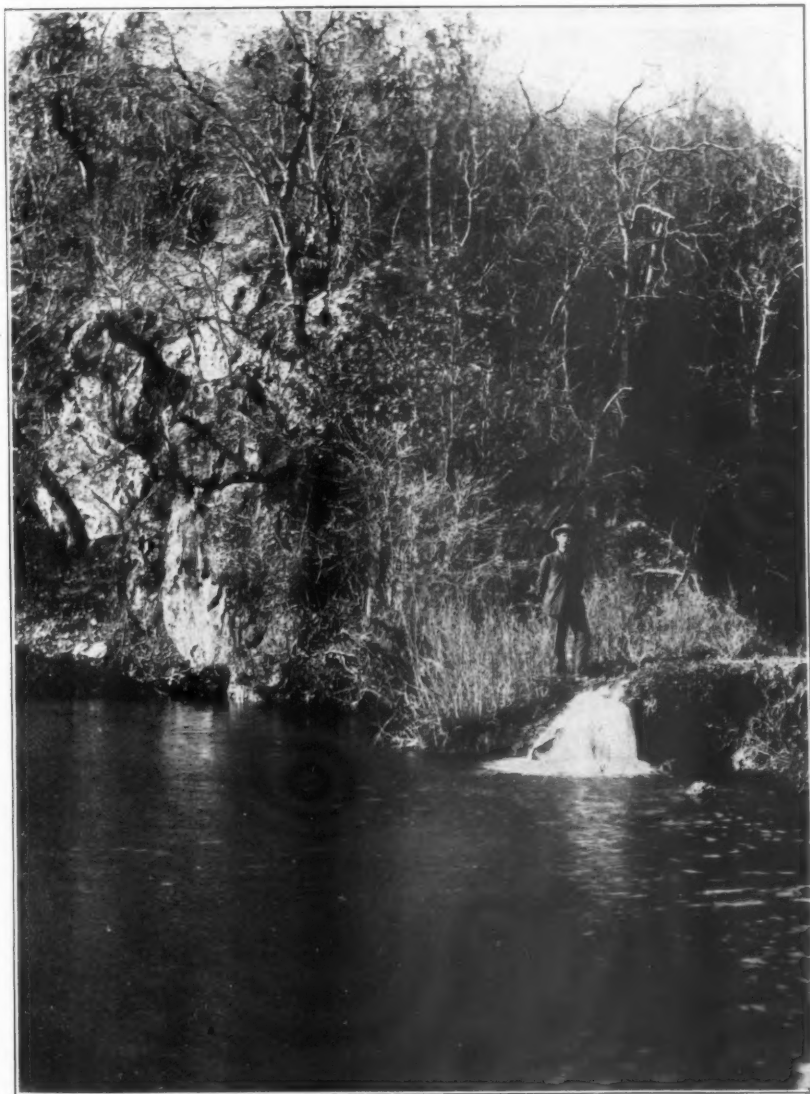
I introduced it in the House, as before stated. It was referred, by the Speaker, to the committee on Agriculture and Horticulture, and by this committee was "referred back to the House with the recommendation that it do pass." It then took its regular course upon the daily calendar.

In the meantime, local beekeepers, and some from a distance, interviewed many members of the House, and urged them to support the bill when it came up for final passage, both by speaking in its favor and by casting their votes for it. This is very important work, for the large majority of the members know little or nothing about beekeeping, and particularly as to the danger of foulbrood if allowed to go unchecked.

In due time the bill came up for its third reading and final passage, and went through the House with a good majority. The most of those who voted against it did so through ignorance or by reason of a mistaken notion of economy. What better or wiser economy could there be than to protect and encourage beekeeping in Idaho by the passage of a law that would help save the bees to the State, and thus not only produce more honey, but also have their great aid in the more general and perfect fertilization of fruit and other blossoms, insuring larger crops of fruit and other products?

The bill met the strongest opposition in the Senate, where there were less members who understood the real needs of agriculture, and especially the importance of beekeeping. One senator in particular tried to amend the bill so that its "father" would not recognize his "child." I was very kindly granted the privilege of the floor, and protested as best I could against certain amendments that were proposed, which, if adopted, would have so weakened the bill as to make it useless.

To make a long story short, the Senate finally passed the bill, as amended and then, of course, it had to go back to the House for the latter's concurrence in the amendments as proposed and approved by the Senate. The



L. B. SMITH "LINING" WILD BEES ON HONEY CANYON AT LLANO, TEX.



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House promptly concurred, and so the bill was then "up to the Governor," where it met its unfortunate fate.

Although I had given long distance help in the passage of various State bee-disease bills, when I was editor of the American Bee Journal, this time I had a chance to see "from the inside" just how hard it is to secure the passage of certain kinds of really necessary legislation. After having had this inside experience, perhaps I can give a few suggestions that may be an aid in other States where they are still endeavoring to secure bee-disease laws.

First, be very sure your proposed bill is technically and legally drawn before having it introduced in the legislature.

Second, have as many beekeepers as possible interview personally every member of the legislature. Where such interviews are not possible, get just as many beekeepers and others to write to their representatives and senators, urging them to support the bill when it comes up for passage.

There is nothing like "letters from home" to induce a member of the legislature to do his duty. And this would

apply on any and all kinds of legislation besides beekeepers' bills. If possible, give, in your letters, a number of good reasons why the bill or bills under consideration should become laws. It was my privilege to use such letters a number of times, when certain bills came up for discussion. In fact, one of the Boise newspapers referred to me as the "member from Bonner county who drew on his letter file for arguments." And that particular letter file contained some mighty effective arguments, too, for they came from people (my constituents) who knew

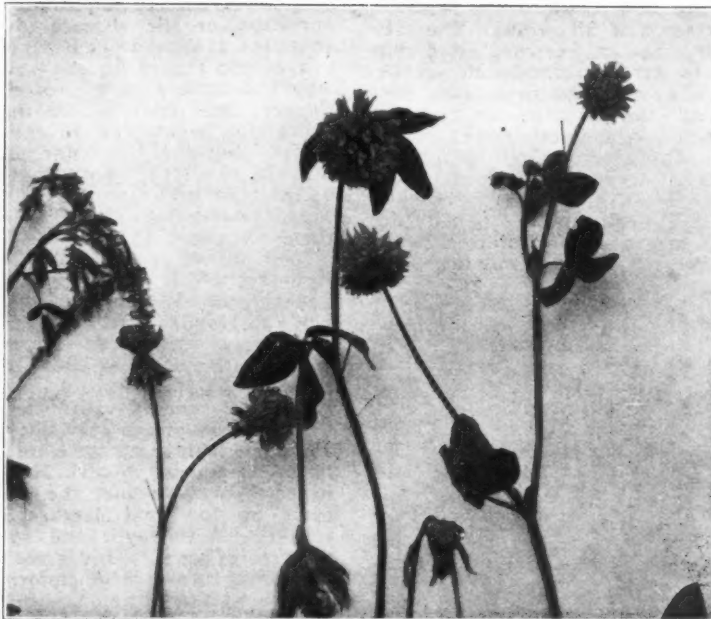


FIG. 36.—DIFFERENT TYPES OF CLOVER BLOSSOMS



FIG. 37—BLOSSOMS OF RED CLOVER



CLOVER BLOSSOM TIME—THREE KINDS OF CLOVER BLOOMING TOGETHER



what they were writing about.

After a bill has passed both branches of the legislature, then "fire in" your letters and interviews to the Governor, if you have reason to think that he might veto the bill or bills. In the instance referred to in this article, I may say that the Governor was seen and was argued with, but to no purpose. He was determined to veto the beekeepers' bill, and did so. He claimed he did it in the interest of economy, but it surely was poor economy, and he will doubtless see his error when it is too late to repair the damage done. He was sincere in his action, but he was sincerely wrong, in this case, at least.

Those interested in the success and progress of things agricultural should see to it that more men (or women) are sent to the State legislatures who really know something about the needs of those who till the soil, and who make their living through rural industries. One or two good lawyers are quite enough in any session of any State legislature. More practical business men and successful farmers are needed there, and less of those who are theorists, or who have never known what it is to labor with their hands, or to make a living from the land.

Experience is a great teacher. One gets a lot of most valuable ideas even in one session of a State legislature. I did.

Sandpoint, Idaho.

## No. 8.—The Honey-Producing Plants

BY FRANK C. PELLETT.

(Photographs by the author.)

We come now to that splendid family of plants to which our most staple honey producers belong; the clovers. This is one of the most valuable families of plants for it furnishes our best forage crops as well as our largest crops of honey. The clovers, alfalfas and sweet clovers are all closely related, and without them, there are few localities where honey production would be profitable. They are so well known as hardly to need description, yet a series of this kind would not be complete without them.

### RED CLOVER.

The red clover, *trifolium pratense*, is a widely grown forage plant which came originally from Europe. It secretes large quantities of nectar, which is usually beyond the reach of the honey bee. There is a difference of opinion as to whether the honey bees really get nectar from red clover. While they work on it freely at times, some venture the opinion that they get only pollen. The opinion has been advanced that in dry seasons, the corollas are shorter, thus enabling the bees to reach the nectar. Dr. L. H. Pammel of the Iowa College of Agriculture, at Ames, has measured a large number of these tubes in an effort to ascertain the facts. As yet he still very much doubts the possibility of the difference in length being sufficient for this purpose. Dr. Pammel will appre-

ciate samples of clover from fields, and, especially, the identical plants on which bees are seen to work, for further test.

So many reports of crops of honey from red clover in dry seasons are heard, that the writer can hardly question the fact that bees do sometimes get honey from red clover. It is well known that the honey bee often reaches the nectar of other plants through the perforations of the corollas made by other insects, and there is a possibility of such a condition with red clover. The insect causing the perforation would necessarily be very abundant, to perforate a sufficient number of blossoms to enable the bees to store surplus from this source. Dr. Pammel proposes to investigate the matter fully and his conclusions are awaited with interest.

### ALSIKE CLOVER.

Alsike or Swedish clover, *trifolium hybridum*, is also native to Europe, but is very generally grown in the northern states and Canada. The blossom resembles white clover but is somewhat larger and has more color, many of the blossoms being rather pink. Instead of a single blossom at the top of a flower stalk, as in white clover, several blossoms occur on a single stem in a manner somewhat similar to red clover. Fig. 38 shows the blossom and leaf of alsike. This plant probably yields as regularly as any honey-producing plant and the beekeeper who is near a large acreage of alsike is fortunate indeed. Where alsike is mixed with red clover in meadows, the yield of hay is considerably larger than is produced by either alone. The seeds are so much

smaller than red clover seed, that it is generally considered that a peck of alsike seed will produce as many plants as a half bushel of red clover seed. Where the usual timothy and clover mixture is grown for meadows, this is about the proportion of seed to use to get an equal stand of the two kinds of clover.

### WHITE OR DUTCH CLOVER.

White clover, *trifolium repens*, like alsike, is perennial and, once established, will persist for many years unless killed by severe drouth or other unfavorable condition. The creeping habit of the plant prevents its being grown for hay, although it is a very desirable pasture plant. The stems lying flat on the ground take root at the nodes or joints, thus making a solid mat. The blossoms appear at the top of stalks which may be from three to twelve inches tall depending upon the soil, moisture, etc. Fig. 39 shows the blossoms of white clover at different stages. This plant is more generally depended upon for surplus, than any other single source, although sweet clover is rapidly crowding to the front. What alfalfa is to the irrigated regions, white clover is to the beekeepers of the humid sections. White clover honey is light in color, with a heavy body and the finest flavor. It is generally considered the finest honey that goes to market in quantity and always brings the highest price.

There are several other varieties of clover grown to some extent and some wild species. Crimson clover is grown in some parts of the south, but is not hardy in the north. In general, all the clovers may be said to be good



FIG. 38.—ALSIKE CLOVER

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honey plants, although the bees are not always able to reach the nectar.

## SWEET CLOVER.

There are several species of sweet clover native to Europe and Asia, a few of which have been introduced into this country. The white sweet clover, *melilotus alba*, and yellow sweet clover, *melilotus officinalis*, are the two most generally grown in this country. The value of sweet clover to the beekeeper has long been known, but it is only recently that its value as a forage crop has been appreciated. In a few localities it has come to be quite generally grown for hay and pasture, and, wherever it has an opportunity to demonstrate its value, it remains permanently, the acreage constantly increasing. Along the irrigating ditches of the west it has become well established, so that it is an important source of nectar in Colorado and other western states. It has long been known as a roadside weed in nearly all parts of North America, and is to be seen along the railroads for miles in many places. The extension of its growth as a forage plant will greatly increase the crops of honey in localities where it becomes popular, and as it is one of the surest plants to yield nectar, the man within reach of it will seldom face a failure.

## ALFALFA.

Alfalfa or lucern, *medicago sativa*, like most of this family of plants was introduced from Europe. It has been grown in the irrigated sections of the west for many years, but of late is being introduced into the humid sections from Iowa to the Atlantic coast. The plant grows vigorously, and pro-



FIG. 40.—BLOSSOMS OF ALFALFA AND YELLOW SWEET CLOVER

duces large quantities of splendid hay. In the arid regions of the west it produces large quantities of honey, although it seldom yields in the humid sections. The writer has not found

the bees working on it freely in Iowa oftener than about one year in five, and then only for a short time during a severe drouth when conditions approached the usual conditions in the arid climates.

Prof. N. E. Hansen of South Dakota has recently introduced some new alfalfas from Siberia that thrive with a small amount of moisture, and it is hoped that these new varieties will thrive on the dry uplands of the west where irrigation is not possible. If they come up to expectations they bid fair to do wonders for the dry land farmers of the west.

Alfalfa honey is of a high quality, and is produced in large quantities by the beekeepers in all irrigated regions.

Atlantic, Iowa.

Copyright: 1915, by Frank C. Pellett.



FIG. 39.—WHITE CLOVER BLOSSOMS IN DIFFERENT STAGES

## Swarming Devices

BY J. E. HAND.

FOR obvious reasons swarming is a calamity to be avoided if possible, hence any invention that savors of improvement in present methods of swarm control should be welcomed by progressive beekeepers. In the June number of the American Bee Journal Dr. Bonney introduces a device which he calls a "swarm saver;" it is supposed to be an automatic self hiver of bees. If Dr. Bonney says it will work in his location I am ready to believe him; in the absence

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of such a statement, however, I take it that he has not tried it, in which case it remains to be proven whether or not it is an element of salvation to the swarm. There have always been two serious objections to all self hivers; first, their principles do not harmonize with the habits of bees, and second there is too much equipment for the amount of service rendered, and in my opinion the swarm saver is open to both these objections. With my limited knowledge of bee nature I would expect such a wide change in the position of the entrance to demoralize the bees for two weeks to the extent that many will join other colonies and seriously affect the honey crop. Furthermore if the queen should succeed in reaching the top story she would in all probability be deserted by the bees, for they will choose their brood and queen-cells in preference to the queen. This is abundantly demonstrated by the difficulty of getting bees out of supers with bee escapes when brood is present. If these deductions are correct the swarm saver simply cages the queen and a few drones. An Alley drone trap will do it better with much less equipment and no disturbance to the bees.

It is not my purpose to under-rate an invention of real merit, but experience along this line has taught me the folly of employing excessive and complicated equipment in the solution of a simple problem. In 1911 we were granted a patent on a simple device to control swarming by shifting the field bees into an empty hive placed close up beside the parent colony. It operated in harmony with the nature and habits of bees; they entered the new hive through their accustomed entrance when the switch was thrown, and finding their queen and a frame of brood accepted the situation and swarming was controlled by the turning of a switch, but we soon learned that extra equipment means extra expense and extra manipulation all of which increases the cost of honey production. While that invention solved the swarming problem with economy of labor, there are greater problems that it did not solve, and its doom was sealed. It was then that we resolved never to invent another method that involved excessive equipment and manipulation, for these are active factors in operative costs. An improvement is of little value unless it reduces operative costs.

Birmingham, O.

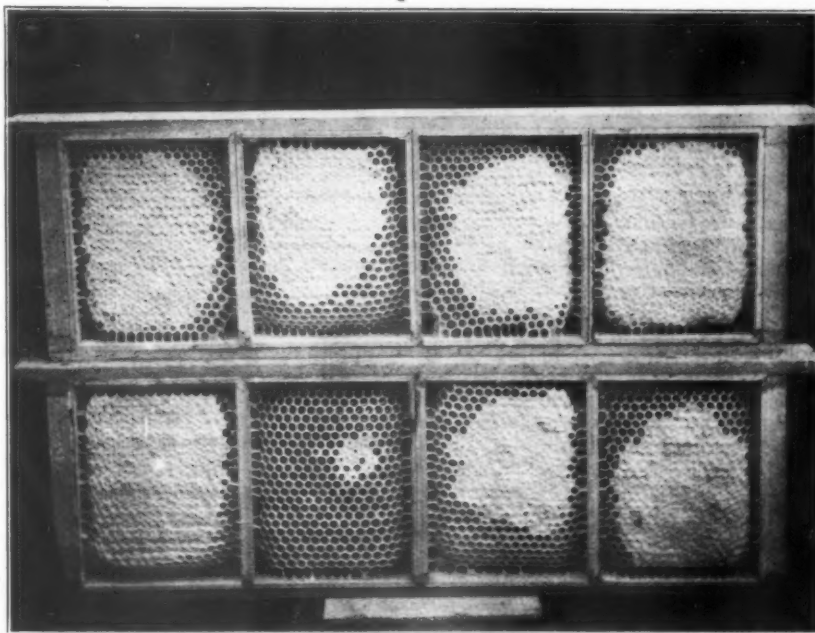
### Feeding Back Extracted Honey —Feeders, How and When to Use Them

BY F. GREINER.

Not many beekeepers believe in and practice feeding back for the purpose of producing comb honey. I would not want to say that it pays always or recommend unconditional-

ly such a practice, and still when conditions are right, weather favorable, etc., I feel that I can well afford to feed back even the very best of extracted honey. It may be that others are not situated as I am, and so do not find the practice profitable. It seems to be a fact: comb honey finds a ready market; the demand for it is not fully supplied and when I turn extracted honey into comb honey the sale is guaranteed. When I have unripe honey I can do nothing better than to feed it back if it were for no other purpose than to get it more

ripened by the bees. One may thus by feeding back, even ripe honey, obtain a product of exceptionally heavy body when such should be desired for some purpose. A most favorable time for feeding back is as soon as the flow from clover ceases or begins to decrease. The colonies used for the purpose should have distinguished themselves during the season as comb honey producers and should be placed on a contracted brood-chamber. One shallow brood-chamber of the sectional hive I consider just right. If I did not use such a hive I would con-



BEST SEALED EDGE OF THE SECTIONS NEXT TO THE ENDS OF FRAMES



F. GREINER PLAN OF PLACING FEEDER IN HIVE BACK OF THE COLONY



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tract by dummies or otherwise.

The beekeeper, if a comb honey producer, who has not at the end of the clover flow a quantity of unfinished sections is indeed fortunate. But if he has he may have them quickly finished up if he will sort them out, place them in supers, put two or three at a time on these selected colonies and feed good honey, all the bees will take. It is so satisfactory to me, that I don't care if I have ever so many unfinished sections. I know that by feeding I can change the unsalable product into fancy honey, for under these artificial conditions I find the bees finish the sections perfectly, sealing every cell. Such combs as are only partially drawn out, or such as contain little honey I do not return to the bees at all, but allow the bees to clean them out. But all combs well drawn out and largely filled with honey, though there may not be a cell sealed, such are well suited for the purpose. When assembling the unfinished sections I always place them in the super in such a way as to have the best filled sections next to the outside, the lightest in the middle. If one face of a section is all completed, I put this face next to the outside, and when assembling the unfinished combs in my wide frames I go so far as to have the best sealed edges of the sections next to the ends of the frames as will appear in the illustration.

Open air feeding is of course out of question. We have to feed inside of the hive ordinarily. The Miller feeder is well adapted to feed on top of the hive and is thus used almost always. I have used it in a hive body back of the hive as well as in front of the hive and with satisfactory result. The plan enabled me to get at the supers easily and use the escape

to free the finished supers from bees. When using the Miller feeder in this fashion a bridged passage from the hive containing the bees to the hive body containing the feeder had to be provided as shown in the illustration. Atmospheric feeders could be used in this same manner either mason jars, ten pound honey pails or even sixty pound square honey cans.

If a feeder can be arranged under the hive, i. e. in the stand, in such a way as to be easily filled, an arrangement of the kind suits me best and is the simplest. Feeders should be filled after bees cease flying, and care must be exercised that no feed is spilled and that outside bees can never get to the feeders.

Naples, N. Y.

### Beekeeping at Iowa Agricultural College

BY FRANK C. PELLETT.

Although it is starting on a very modest scale, beekeeping is at last a part of the regular work of the Iowa Agricultural college at Ames. Although many of us were hopeful of larger facilities to begin with, the work will now go on and will be developed to meet the needs of the beekeepers of the state. The Iowa college is one of the best and no part of its work will long be permitted to lag behind that of other states.

DR. L. H. PAMMEL.

The beekeepers are very fortunate in the men who have charge of the work. Dr. L. H. Pammel head of the department of botany has been connected with the institution for twenty-five years. He is beginning an extended study of honey-producing

plants, nectar secretion and other subjects in connection with the relation of the honey bee to plants. This work will require several years to complete. Those who know Dr. Pammel, or who have seen his monumental



DR. L. H. PAMMEL.  
Professor of Botany, Iowa College of  
Agriculture

work on the "Weed Flora of Iowa," or his "Manual of Poisonous Plants," feel that this new work will be of far reaching value, not only to the bee men of Iowa, but probably to the beekeepers of the world at large.

Dr. Pammel intends not only to make a thorough study of the honey plants of the state in order to pro-



GREINER'S FEEDERS IN BODIES BACK OF THE COLONIES



DR. L. H. PAMMEL ON THE LAWN OF HIS  
HOME AT AMES, IOWA

# American Bee Journal

vide the beekeeper with dependable information that will enable him to improve his locality, but to investigate the conditions that influence nectar secretion, the insects that compete with the honey bee in gathering the nectar, and assist the bee in plant pollination. These are only a few of the many problems under investigation in the department of botany by Dr. Pammel and his assistants. It is estimated that at least four years will be necessary to cover the ground laid out in these investigations and Dr. Pammel is anxious to get in touch with the wide awake beekeepers of Iowa and surrounding states in order to learn of any peculiar conditions that may arise. If the beekeepers of Iowa could realize the possible value of this work, they would co-operate most heartily and send to Dr. Pammel at Ames samples of the plants on which they find bees working and make notes of the length of time they are seen to work, etc. Dr. Pammel will be at the field meet at Hamilton September 7th to get personally acquainted with the beekeepers present, and will talk on the "Place of Botany in the Beekeepers' Education" at Keokuk the following day.

PROF. C. E. BARTHOLOMEW.

Prof. Bartholomew is no stranger to the beekeepers who attend the Iowa conventions. At the last meeting he was elected President of the association. The beekeepers have confidence in Prof. Bartholomew,

both as to his ability and his loyalty to the business of beekeeping. He has been a practical beekeeper as well as a theoretical student of apiculture. A scientifically trained man with practical experience can do much for the beekeeping interests in such a position as he occupies. Prof. Bartholomew is not a boomer and is careful to advise against taking up beekeeping ill-advisedly. While he recognizes the fact that it is but a partially developed business and there is no immediate danger of crowding the field, he makes it plain to those with whom he comes in contact that the untrained and careless owner is a detriment to the industry and should be discouraged. According to his instruction the beekeeper should never own more bees than will be properly cared for. If a man has only time enough to care for one or five colonies he should never have more, and he never should have any unless they are to be given proper attention.

The influence of these men upon the students of the college who are going out to the farms of every corner of the state will be very helpful to the beekeeping interests. The student who leaves the college will feel that beekeeping is worthy of respect and that it is not to be lightly taken up with half a dozen stray swarms in nail kegs.

Prof. Bartholomew is keeping elaborate records at the experimental apiary. The daily and hourly temperature is recorded by self-recording in-

struments, the humidity of the atmosphere, the direction and velocity of the wind and other weather conditions are carefully noted. That weather conditions influence honey production to a great extent is well known to all practical beekeepers and it is proposed to learn why and how this influence arises. A self-recording scale will probably soon be in operation so that the gain or loss for any day can be noted not as a whole but by minutes or hours. This record together with the weather conditions will be very valuable. By means of elaborate experiments Prof. Bartholomew proposes to ascertain just how much honey is necessary to produce a pound of bees and many other things of interest and value to the honey producer. That the results of these experiments will be very valuable to the beekeeping specialist is apparent to all. Prof. Bartholomew will also be at Hamilton and Keokuk and will have something interesting to tell those in attendance.

Atlantic, Iowa.

## Shipping Bees to British Columbia

BY F. DUNDAS TODD,  
(Foulbrood Inspector.)

ACCORDING to the terms of one of the clauses of our foul brood act all bees imported into British Columbia are quarantined for 9 months at the point of entry. The transportation companies, to protect themselves from a lot of trouble, refuse to accept bees for delivery in British Columbia, so shippers in the United States and Eastern Canada will find it wise to turn down all orders from this province.

Queens in cages are at present admitted, but every beekeeper has been advised to buy only from breeders who can show a clean bill of health from an inspector.

Today British Columbia has fully one thousand beekeepers, mostly beginners on a small scale, but as the inspectors become acquainted with its immense territory they begin to believe that the province will at no distant date march into the front rank as a honey producer. Our government is guiding the efforts of every one in the industry and our progress is very rapid. We cut down our importations of honey last year by 58% and trebled our home production.

Our primeval forests are literally full of honey bees in the settled districts, so there is no excuse for anybody wanting to import from other regions.

The inspectors' job is to keep this huge area free of foul brood. We have had four attacks in five years, all traceable to imported bees. I am fighting the last and most serious. It originated in the city of Vancouver from imported queens, and was carried to a couple of other points by unlucky purchasers. Last fall I found



PROF. BARTHOLOMEW MAKING HIS DAILY WEATHER RECORDS AT THE EXPERIMENTAL APIARY



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American foul brood in 20 apiaries, affecting 45 colonies, all of which were burned.

We make no pretence of curing the disease in British Columbia; one diseased cell condemns the hive to the flames. Now that I am in the fight I endeavor to trace the spread of the contagion as all information is valuable. Here is one point I discovered. In one apiary of five colonies I found one affected. The nearest diseased colony, a strong one, was fully two miles away. The affected colony was also very strong, having been a very large first swarm. After some close questioning I found that the hive body had been bought from an infected apiary, where it had been in use for a weak swarm just three weeks. The frames were new with full sheets of foundation. Advocates of the "shake" system of cure will kindly take notice. As I see it the essence of this plan is a pure gamble. You despoil the bees of all their combs, stores and brood, and chance that about 99% of the germs are in the plunder; then you hope that the germs on the bees and hive will never get an opportunity to enter the anatomy of a bee baby. We in British Columbia are just as anxious to wind up the career of the hundredth germ as the other ninety and nine. One of our inspectors in one apiary found that the spores must have lain dormant three years before their opportunity arrived, for the hive, brought from an infected region in Oregon, had been in British Columbia that length of time before foul brood developed.

Victoria, B. C., Canada, March 11.

(The "shake" system, when thoroughly applied, has been so successful that we cannot help recommending it, but it is well to disinfect the hives.—Editor.)

### A Good Bottom Board

BY ED SWENSON.

**T**HERE has been so much talk on different bottom-boards and feeders combined, that I will describe the one I like best.

It is made 4 inches deep, with the back nailed solid, but the front piece is hinged so it may be let down and used as an alighting-board (1). This piece has two hive hooks which fasten on to the side pieces to hold it in place when raised (2).

A board of  $\frac{3}{4}$  inch material (3) slides in or out, and may be raised or lowered as occasion requires in fall, winter and spring. In the winter it is lowered (4) so as to give a deep clustering space under the frames (which seems to be their choice when conditions permit). It is also impossible for the entrance to become clogged with dead bees as it is over 3 inches above the bottom. In the spring this board is again raised so as to make less room for the bees to keep warm. When warm weather sets in, this board is slipped out and a screen frame put in its place.

There are 2-inch pieces nailed on the underside of the frame, which hold it together, and they also raise it up from the bottom, so the air comes through from the underside and circulates through the hive when the screen is in. The rim of the screen has two headless lath nails partly driven in on each side which slide in saw kerfs cut into the side pieces for that purpose. The front part of the screen may be lowered (5) so as to form an incline. If the bees are likely to build combs below the frames, the screen may be raised so that there will be only a bee-space between it and the frames, and it will still serve its purpose as a ventilator. It may be lowered so as to give a 3-inch space below for moving to and from out-apiaries or in summer as extra means for ventilation, to help prevent swarming (6).

The entrance block is a 4-inch piece (7)  $\frac{3}{4}$ -inch thick with a V notch cut into it and a piece of screen attached on one side. This also serves as an alighting-board and is slipped in or out to regulate the size of the entrance. By shoving it far enough the entrance may be entirely closed.

The bottom-board may be used as a

feeder by simply inserting a dripping pan with a float in it. But I like the friction-top honey pail of J. L. Byer better.

Spring Valley, Minn.

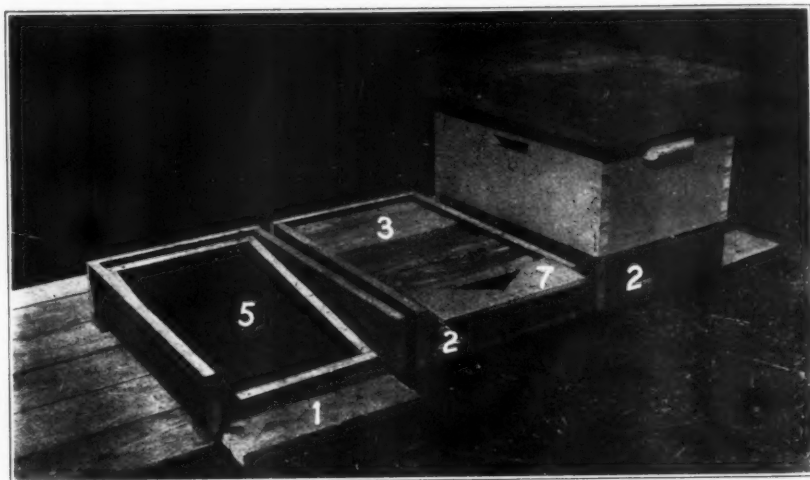
### An Analysis of Dark Gray Honey

**Does Soot in the Air Get Into Nectar and Discolor the Honey?**

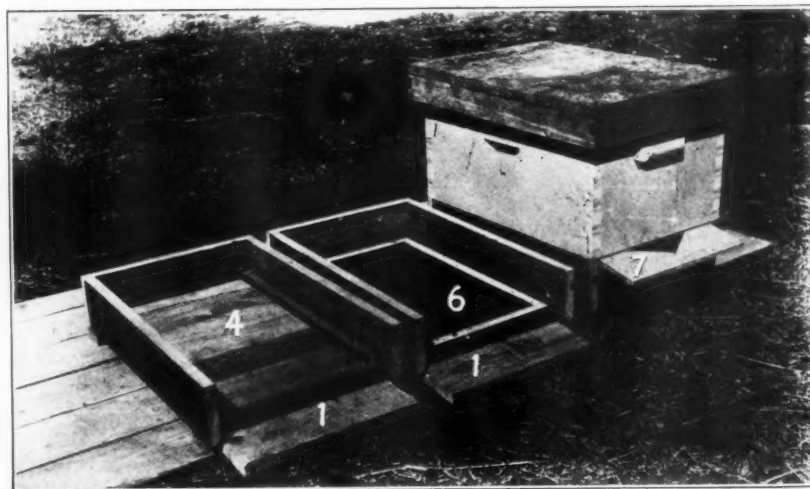
BY J. A. HEBERLE, B. S.

*Based on a report of Dr. J. Drost, in the Bienen Zeitung*

**A** SAMPLE of basswood honey from Mr. H. Ninebuck, of Hamburg, was sent for an analysis to Dr. J. Drost, that was remarkable for its dark color (mouse gray). Mr. Ninebuck contends that the off color is from soot. Those not agreeing with him say that during the short time flowers secrete nectar but very little soot could find its way into the nectar; besides, a good many flowers and blossoms are bending over or hanging, etc., thus practically preventing soot



ED SWENSON'S BOTTOM BOARD



ANOTHER VIEW OF SWENSON'S IDEA OF A GOOD BOTTOM BOARD



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from settling in the nectar. Dr. Drost says the air in Hamburg, and its immediate vicinity, is charged with more soot than elsewhere, and consequently more soot can get into flowers and blossoms where the form does not preclude this than at other places; yet the quantity of soot that may thus get into nectar and honey must be so minute that it could not cause such a dark color as the sample showed.

The beekeeper who furnished the sample stated that the yellow blossoms of basswood when falling were still filled with nectar, and that he has seen the bees scrambling on the streets sucking this nectar. Dr. Drost holds that honey from such blossoms is at best an exception, and while such honey probably would contain a little more soot and dust than from fresh blossoms, the quantity of honey from such fallen blossoms compared with entire crop would be so insignificant that it could not seriously be considered as causing a discoloration.

Result of the examination and analysis.

Appearance, dark gray; consistency, crystallized.

Odor, very aromatic.

Taste, differed considerably from basswood honey; very spicy.

Water, 15.88 percent.

Dry matter, 84.12 percent.

Invert sugar, 77.90 percent.

Cane sugar, 1.09 percent.

Sugar free extract, 5.13 percent.

Polarization before inversion, 1.70 percent.

Polarization after inversion, 1.92 percent.

Fiehe's test for artificial honey gave no reaction.

Ley's test, greenish brown; this is not unusual.

Lund's test, 1.0 cm. precipitate.

Alcohol gave a small but distinct precipitate.

Fiehe's test for starch sugar, none.

Mineral matter, 0.52 percent.

Sand, just a trace.

Chlorine, 0.05 percent.

Soot, decided trace.

Pollen, the characteristic pollen of basswood was present nearly the same amount of a small, round, decidedly transparent pollen, and a few other pollen grains were found.

## REMARKS.

According to odor and taste this honey could not be called pure basswood honey. The greater part from the centrifugated solution was from basswood. Considering that the genuine basswood honey often shows but a small amount of pollen; in some instances its presence cannot be proven, probably because the blossoms are hanging so that but little pollen falls in the nectar, we may assume that the bulk of the honey in the sample was from basswood blossoms. The small, round, colorless pollen hardly got there by chance, there is most likely honey from the same flower mixed with the basswood honey in the sample. On account of the lack of literature this pollen could not be identified.

The chemical analysis showed a very high amount of ash, about double the amount usually found in basswood honey in this part of the country. The polarization of a 10 percent solution

before inversion was below the average. The color of the solution was the same dark gray as the honey. After standing for days no change occurred in the color, nothing settled to the bottom that might have shown that soot had been mixed with the sample, not even when the solution was centrifugated.

The matter causing the dark gray color could only be separated by means of a flocculent (aluminous) precipitate. The filtrate from this precipitate had a faint yellowish green appearance as by other honey. The dark gray had disappeared and did not reappear when the filtrate was evaporated to the consistency of honey. The aluminous precipitate which is itself colorless, had taken with it the dark coloring matter. After dissolving this gray precipitate with hydrochloric acid there remained on the filter a deep black shining residue which burnt readily and may be taken to be soot. If other honey is treated the same way with alum and the precipitate dissolved in hydrochloric acid, there remains no residue that has anywhere near such a deep black color.

Dr. Drost concludes from this analysis, and by comparing it with other analysis, that the soot in the sample came not from nectar of flowers alone.

The high content of ash and the comparative small deviation of polarized light, for basswood honey, point to an admixture of honey from honeydew. The amount from honeydew, however, must have been small, otherwise the polarization would have been more to

the sight, and more dextrine would have been present. Aroma and taste also point to a small admixture of honeydew. Honeydew most likely comes in contact with and holds more soot and dust where these contaminate the air, than nectar from the various flowers and blossoms.

Honeydew is found around Hamburg, especially in hot, dry years on basswood, maple, and other trees and bushes to a considerable extent, and it may come in contact with more soot and dust than elsewhere. It is only soot in the finest state of division that is found in honey which probably passes the bees as it does the filter. Has discoloration not been noticed in great industrial centers, where much heavy smoke prevails?

Kempton, Bavaria, Germany.

[This article is of especial interest to me because I have already often wondered whether the peculiar muddy appearance of honeydew is not in part derived from dust. The production of the aphis honeydew is very great at times, and some of it remains spread upon the leaves of trees several days before being harvested. It dries up during the warm sunshine and becomes again moistened by the night's dew. Hence we find the bees busy upon it early in the morning. If the dust or soot thus gathered could be eliminated, perhaps the honeydew would lose a part of its repulsive appearance.—Ed.]

## DR. MILLER'S



## ANSWERS

Send Questions either to the office of the American Bee Journal or direct to  
DR. C. C. MILLER, MARENGO, ILL.  
He does NOT answer bee-keeping questions by mail.

### Laying Worker

Did you ever have any experience with laying workers in a hive where a young queen has hatched? This is my experience. On May 9 I transferred a swarm of bees from a hive which I expected to discard on account of its odd size. On May 30 all of the brood was hatched, and on examination I found a cell already hatched, and by searching I found the young queen. Today I went through the hive to see if the queen was laying, and all of the eggs and larvae which I found were in drone-cells, and the eggs scattered about in worker-cells. I examined closely the comb on which I found the most drone-cells, and then and there I saw a worker doing her work. What do you think of that, with a young queen in the hive and she was a beauty. I closed the hive, thinking things might right themselves if left alone, but in the afternoon I found the queen on the alighting-board dead with a ball of bees around her. I broke up the colony at once.

Would you kindly tell me what you think of this case. When I say they had a laying worker, I mean to say that I saw her lay one of her eggs in a drone-cell. INDIANA.

ANSWER.—Your experience is quite exceptional. It is not often that a laying worker is caught in the act. In all my experience I never saw it, I think, more than once. If your bees are Italians, it is remarkable that laying workers should appear when they did, although with some of the other races lay-

ing workers are inclined to put in an appearance whenever laying is not normal. You speak a little as if there were only one laying worker present. The probability is that there was quite a large number.

### Extracted or Comb Honey?—Royal Jelly

1. I have a few hives of bees and wish to increase, but am undecided as to which to do, buy fixtures for section or extracted honey, and if section whether plain or bee-way? It may save me quite an expense later on.

2. How long will royal jelly, taken from a queen-cell, keep and still be fit to use in grafting cells? OHIO.

ANSWERS.—1. Whether it is better to produce comb or extracted honey depends upon the honey and the market. The darker honeys do not sell so well in sections, and in some places consumers prefer sections so strongly that even dark honey pays better in sections. From what I know of your location, I think you have light honey, but your market for extracted honey is unusually good, so that my guess would be that you will do well to extract.

2. I don't know. Much depends upon the thickness of the jelly and upon how it is kept. If very thick, in a warm place with

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air stirring so as to encourage evaporation it might be unfit to use in less than an hour. Not very thick, in a cool place with little chance for evaporation, I *guess* it might keep two or three days.

## Shipping Bees—Caucasian vs. Carniolan

1. I want to take a few swarms of bees with me to Minnesota about July 30. The car will likely be on the road about a week. How shall I prepare the bees for shipment?  
2. What are the physical features that distinguish the Caucasian bees from the Carniolan?

ILLINOIS.

ANSWERS.—1. The frames in your hives must be fastened so they cannot move about, although that is not necessary if you have frames with fixed distance, as you probably have. If the entrances to your hives are two inches deep, closing them with wire cloth may give all the needed ventilation. Otherwise better have the entire top covered with wire cloth by means of a frame an inch or two deep. With only a few hives, you can have each one on the floor, kept in place by cleats nailed on to the floor. If the weather is very hot, sprinkle the bees with water every day or two.

2. The main difference in appearance is that the whitish ring is not so distinct in Caucasians as in Carniolans. Carniolans look enough like common blacks to make it hard to distinguish them, and Caucasians look still more like blacks.

## Is a Bee Sting Fatal?

Does the sting of the honey-bee ever prove fatal? I have heard that if a person is stung on the end of the nose it is fatal. Is this a fact?

TENNESSEE.

ANSWER.—I don't believe a sting of itself ever caused death. There have been cases where persons died after being stung. I've been stung many a time on the nose, and I'm not at all dead.

## Early Queen-Cells—Spreading Brood

I looked over my bees for the first time May 5, and gave each colony clean bottom-boards. Two of the colonies seemed so forward that I at once gave them an extra full depth super, and they went to work therein. No. 30 and 33 continued showing vigor. On the 10th I was surprised in finding a queen-cell in the lower body of No. 33, about two days beyond the egg stage; there were also in the upper body eggs in three or four little globular cells. No. 30 had one such globular cell with an egg. No other colony, so far as observed, showed any sign of swarming, both these colonies had quite a number of worker eggs and comb—place for more eggs. The upper chamber contained only four or five frames, some only with foundation. Last year's frames with foundation were drawn out at once this year; only one frame has some drawn, and that to but one-third of its extent.

My colony, No. 28, had nearly six frames filled with eggs and brood, the other four were full of old honey. I put on a super the 14th, and into the same I put the four frames of honey, and in place of the latter below I put four frames of empty comb. By the 10th, nothing was done in these combs, so I put them at the opposite side of the hive-body from where they were.

A good colony, in five days, not having done anything as stated, might be an indication of the state of this season, and in judging upon Nos. 30 and 33, it might be of help. It has been mostly cool, cloudy and windy here, and especially so during apple bloom, which now is over.

On May 11, I spread brood in three colonies, but feared afterwards I had done wrong; however, a few days after I examined the colonies, and could not see that any harm had been done. There was not any chilled brood, and half of the transferred frames had eggs in them. PENNSYLVANIA.

ANSWER.—According to what you say, queen-cells must have been started in No. 33 May 14. That is probably quite exceptional in your locality, but it is not certain

that swarming will result. A cold spell may induce the bees to empty out those cells. May 24, I was surprised to find that the queen had stopped laying in some of my colonies. The weather had been hot in April, but cold in May.

You spread brood, and a few days later could discover no harm done. Be thankful; next time you may not get off so well. It is, however, just possible that harm was done without your discovering it.

## Age of a Queen

Is there any way to tell the age of a queen, also how old should a queen be allowed to get. We will have a good flow of nectar here in Wisconsin if we get a little dry weather so that the bees get a chance to work.

WISCONSIN.

ANSWER.—There is no certain way to tell by the looks of a queen how old she is. After you have some experience you will be able to make a fair guess as to whether a queen is old or young, as an old queen is more inclined to have a shiny look because her plumage is worn away. Sometimes, however, a young queen has the same look. An old queen is not likely to move about on the combs in as lively a manner as a young one.

There are different views as to how old a queen should be allowed to become. Some think not more than two years. In my own practice I allow her to live as long as she will, for when she gets too old the bees will supersede her without any interference on my part. Of course, if she is unsatisfactory in any way, I get rid of her as soon as I can.

## Swarming

I purchased a colony of Italian bees in a box-hive in the fall of 1914. I wintered them successfully, and the colony was strong in the spring. I purchased a movable-frame hive in which to hive the expected swarm, a smoker and other necessary supplies. I ordered a copy of "Langstroth on the Honey Bee," and made a careful study of it.

On June 5 the bees swarmed and clustered on a limb of an apple tree, and in ten minutes after they returned to the old hive. They swarmed again the next day, but again they returned to the hive. I was told they would swarm again, but as the weather has since been cloudy, and there has been frequent rains, they have not swarmed again. What was the cause of this behavior? Will they swarm again and cluster without returning to the parent colony? As I have a new hive fitted with foundation I would like to have bees in it. Is there any method of artificial swarming which could be practiced? As I intend to transfer the bees from the box-hive into a movable-frame hive, what method would you advise under the following conditions: The box-hive has two entrances, one on the bottom-board and one six inches higher. There are eight 1/2-inch holes in the top of the brood division to the surplus division. During the two weeks since the bees swarmed they have clustered in the surplus division of the box-hive. What would you do under the circumstances?

ILLINOIS.

ANSWER.—There may have been something wrong with the queen's wings so that she could not go with the swarm. In such case the swarm may issue again once or several times. But about a week after the first time there will be a young queen reared and she will come out with the swarm. Evidently, however, yours did not swarm at that time, for the swarm first issued June 5, and your letter is dated June 19. Likely the very bad weather discouraged them from swarming; but you may be pretty certain that a young queen has taken the place of the old one.

Yes, indeed, you can practice artificial swarming, and in your book, "Langstroth on the Honey-Bee," you will find a whole

chapter devoted to it, Chapter VII.

There is nothing in the case to require anything different in transferring from the instructions given in your books.

## Diseased

I have a hive of bees that won't build up. They have plenty of stores and are rearing young, but about the time the young are hatched out they seem to be sick or something, and the old bees take them out of the hive and drop them on the ground. I thought at one time they were queenless, but upon going through them I found a nice queen. I do not think it is paralysis, as it does not seem to affect the old bees at all. We have no foulbrood in this part of the world that I know of. I was thinking of killing the old queen and putting in a frame of brood and let them rear another one. Do you think that would be the thing?

MISSISSIPPI.

ANSWER.—I don't know what the trouble is, unless paralysis. I doubt that rearing a new queen would help.

## Swarms Leaving Hives

I am having a lot of trouble with swarms. Three swarms came here from other hives. The first one I put into a nice 8-frame hive with new combs. They stayed about two or three days and then said good by to us. The next one was a baby swarm, not much larger than one of our large Oregon apples. I put it in a hive and put them in a small space and gave them two frames with a little capped over honey. The next day I found the queen was dead and the bees gone. The last one I gave more attention. I put them in a hive and gave them plenty of honey. (I thought may be the lack of honey was the trouble.) They came out and went into a tree, but not the one I took them from. I put them back and they stayed a few days, and today they are gone. Where did I fail?

OREGON.

ANSWER.—Without knowing more about the matter I can only guess, but it's a pretty safe guess that the trouble was the usual one, heat or too close confinement. A swarm is always in a state of excitement, and so heated up, and if they are put in the hot sun or if their hive be not sufficiently open, they are likely to think, "This is too hot a place for a home, we'll hike for a cooler place." So for a few days it is well to have the cover partly open and the hive raised; and it should be in a cool place or else shaded in some way. The dead queen you found may have been accidentally killed. More likely it was an afterswarm with more than one queen, and all but one were slain in a royal battle.

## Young Queens—Prevent Increase

1. How long after the prime swarm issues forth does the young queen hatch?  
2. Is it right to destroy all queen-cells but one right away after the swarm comes out?  
3. In placing the Alley trap in front of the hive to catch the drones, is there any danger of capturing the queen? Does the queen ever come out of the hive after her wedding flight, and at any other time besides when she comes out with the swarm?  
4. How would this work if I didn't want an increase. Prevent all swarming for two years, and keep the same queen, and after that time let them swarm once or buy a young queen; go to the hive every week and keep on destroying all queen-cells and give them no chance to rear a queen.

CALIFORNIA.

ANSWERS.—1. Ordinarily the first virgin leaves her cell about a week after the issue of the prime swarm. If, however, the swarm be delayed a day or more by bad weather, then the time of her emergence after the swarming will be lessened a day or more. It may also be increased in case the prime swarm issues before the first queen-cell is sealed.

2. Yes; although there is a possibility that you may not leave a cell with the best queen in it, and in rare instances there may be no live queen in it. If you are willing to take the trouble, there is a better way. About a



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week after the first swarm has issued, go to the hive every evening when the bees have stopped flying, put your ear to the hive and listen. When the first virgin has emerged from her cell, you will hear her piping, a shrill high-pitched voice, saying pe-e-eep, pe-e-eep, several times, each time shorter than the previous time. Then the virgins yet in their cells will reply, "Quahk, quahk, quahk," in a coarser and more hurried tone. Next morning kill *all* the cells in the hive, paying no attention to the queen at liberty. There's a still easier way, a way of getting the bees themselves to do the killing for you. When you hive the first swarm, set it close beside the old hive, facing the same way, or, perhaps better still, set the swarm on the old stand with the old hive close beside it. A week later move the old hive to a new stand 10 feet or more away. The bees will do the rest.

3. A queen may come out more than once on her wedding flight, and she may come out with a swarm; at any other time there's no danger of catching her in a trap.

4. Like enough they may supersede the queen. At any rate, if you can keep them from swarming year after year you needn't trouble about a queen. But it won't work to merely keep killing queen-cells. They'll balk you every time. Don't be afraid to send all the questions you like directly to me.

## Buying Bees—Location, Etc.

1. What will a swarm of bees cost in Pennsylvania without a hive?
2. Where would you keep the bees, under a tree or in the sun?
3. What kind of bees would you get?
4. Would you get the bees in Pennsylvania?

ANSWERS.—1. The price of a swarm of bees varies greatly according to circumstances and places. There are places where you might not be able to buy a swarm for \$10. In other places you might get plenty of swarms at a dollar apiece. What they can be bought for in your locality you can find out by inquiry easier than I.

2. In Pennsylvania under a tree is better.
3. Probably you can get nothing better than Italians.
4. Other things being equal, the nearer home the better.

## Increasing Income by Judicious Selection and Breeding

In a locality where the yearly average production is \$3.00 per colony, could one reasonably expect to increase it to \$5.00 by judicious breeding? NEW YORK.

ANSWER.—That depends. If the locality is one where the highest type of beekeeping has been carried on for years, with constant attention to quality of stock, and yet the pasturage of such character that only \$3.00 per colony can be obtained as an average, then I should say that in an ordinary lifetime it is not likely the intake could be increased even to \$4.00 per colony. Such a condition, however, is hardly contemplated by the questioner. If the supposition be that average bees are considered, having had the average management, then I should say that within a very few years the \$3.00 could be increased not only to \$5.00 but to \$6.00, and how much more I do not like to say, for I don't want to be considered a visionary. The fact is I don't believe the average beekeeper has any right conception of the possibilities in beekeeping in the way of improvement of stock and the gains to be made by it.

If there's any one thing more important than another that I would like to urge upon the ambitious young beekeeper, it is to

work constantly and persistently toward the improvement of his stock, breeding always from the best. Too often all that he does is to buy from some one a queen supposed to be good, introduce her into a colony, and then let things take just the same course they did before. At that he may be largely the gainer for the amount he has invested. But left to themselves the bees are likely to begin deterioration after the first year or so. The poorer bees are likely to

swarm the most, and his increase will be mostly from them, the better blood soon disappearing. Instead of that he should encourage increase from his best stock, keeping close tab on yields so as to know which his best colonies are; rearing at least a few extra queens, so as to have them on hand whenever there is occasion for their use. Let this be kept up year after year, and he will be surprised at the increase in his yields.

## REPORTS AND EXPERIENCES

### North Carolina Experience

I noticed in the June issue of your most valuable Journal, that you have very little information concerning North Carolina beekeeping. I arrived here April 2, and found the country covered with heavy snow, and after that we had a continuous cold rain for two weeks, so you see it was a hard start for me.

I bought 61 colonies of bees, 17 in movable frame, and 47 in old fashioned log hives. With the movable frames I had it easy, but with log hives I had an awful time to transfer them, but I succeeded. I set the log hives upside down and put my hives on top, and thought they would go in when they got ready; but some did not, so I drummed them up and put a queen-excluder between and kept on adding bodies, three and four high. After three weeks I set the old hives sideways for a week, and then took them away empty.

I brought 266 empty hives with me, and I have them nearly all full from those above mentioned. I hope to report later how much honey and how much more increase I will make. PETER SCHAFFHOUSER.

Havelock, N. C., June 12.

### Outlook Not Bright

The outlook for a big honey crop is not so bright now as it was in April. Swarms are coming sparingly. The weather is too cool and wet. RUDOLPH UMLAUFT.

Dorchester, Wis., June 21.

### Poor Wintering, But Good Prospects

Bees are not doing very well as yet; it is cold and wet. My wintered swarms came out very poorly. Out of 40 hives put into the cellar last fall, but 22 came through. They died after having been taken from the cel-

lar. I am in northwest Connecticut, and have already had five strong swarms. We are hoping for a better crop, as we have more corn, buckwheat and white clover than in other years. We like your journal very much. F. B. REED.

Lakeville, Conn., June 25.

### Late Season

The season here is very backward, the first sweet clover bloom is just opening. I believe, however, that after the abundant rains we can look for a good flow, and coming late there will be lots of bees to take care of it. A. V. SMALL.

St. Joseph, Mo., June 15.

### Good Prospects

My loss on bees from prolonged cold spells last winter and poor honey has been heavier than for many years, but I kept on feeding those that were left, and they are starting nicely. There are not many bees left in the county. Our honey crop last year was the poorest in many years, as white clover was all killed by two drouthy seasons.

We are having excessive rains, and the white clover is getting a good start. The linden bloom is extra fine, so we may expect a medium honey crop. MAX ZAHNER, SR.

Lenexa, Kans., June 22.

### Good Flow On

The bees have been doing finely here the last three weeks. There is the best honey flow I have known for several years. I started with 12 colonies, and now have 36. I bought 6 of these and 2 were given to me. I cut one bee tree and secured a fair sized swarm, and I found one swarm. The other colonies I made by artificial increase. Some



WALTER WRIGHT IN HIS APIARY AT RIVES JUNCTION, MICH.



# American Bee Journal

of the new swarms are storing honey. We had another heavy rain last evening, and it looks now as though the white clover would run well into August.

Swarming is still going on in this locality. I have heard of several swarms. The bees in my home and out-yard do not show much inclination to swarm. I have done quite a little transferring and requeening for other people this season.

J. W. STINE,  
Stockton, Iowa.

## Too Much Rain

It looks very discouraging. We had 21 days in June with rain, and 6 out of 8 days so far this month that it has rained. One day it is warm, the next day or two it rains; then we have a cold spell so the bees will not fly. Clover never stood or bloomed better and there is plenty of bloom yet; would probably get one-half crop if it only stopped raining and warmed up.

FRANK LANGOHR,  
Columbia City, Ind., July 15.

## Clover Plentiful

Bees are doing well here this season. The greatest amount of white and sweet clover for years. Only drawback is too much rain. I think the excessive rains will keep the clover blooming for some time to come.

Topeka, Kans., July 16. O. A. KEENE.

## Ohio Field Day

The second annual field meeting of the Ohio Beekeepers' Association will be held at the apiaries of Fred Leininger & Son, Delphos, Ohio, Aug. 4. The day will be spent in visiting the home and out-apiaries, and the evening will be taken up with a program to be arranged later.

E. R. KING, Sec.

## Conditions in California

Our honey season in southern California is drawing to a close. There has been, on a conservative estimate, about an average of a half crop in the southern half of the State, with the exception of Imperial county, where, from the best of authority, it is estimated all the way from a failure to 50 percent of their usual crop. This is due to the heavy winds which occurred in that section during May and June.

Reports from northern California are that there is no honey taken to date. Everything late, and at present outlook there cannot be over three-fourths of a crop, and probably not that.

The quality of the honey this year is for the most part extra good. In the sage belt, up to the coming in of the sumac bloom, the honey has been water-white, of exceedingly heavy body. This has given the market an unusual percentage of light honey in proportion to the crop yielded.

Prices are rather better than last year, white honey bringing 5½ to 5¾ cents wholesale to the buyers. While there have not been many buyers in the market, some firms have bought heavily, the Guggenheim Company for one. This surely shows wisdom on the part of the buyer, as this quality of honey is not produced every year. Some producers are holding for higher prices.

The white sage has given a good flow this year, better in our immediate locality than the black, which is an unusual thing. This, I believe, is due to the damage done by the moth which worked on the black during the damp weather in April and May. Wild alfalfa has given a light yield here.

## Classified Department

(Advertisements in this department will be inserted at 15 cents per line, with no discounts of any kind. Notices here cannot be less than two lines. If wanted in this department, you must say so when ordering.)

### BEES AND QUEENS.

PHELPS' Golden Italian Queens will please you.

BEES AND QUEENS from my New Jersey apiary. J. H. M. Cook,  
1 Atf 70 Cortland St., New York City.

GOLDEN all-over Queens. Untested, \$1.00. Tested, \$3.00. Breeders, \$5.00 and \$10. Robert Inghram, Sycamore, Pa.

PHELPS' Golden Italian Bees are hustlers.

QUEENS FROM THE PENN CO. See our large ad. elsewhere in this Journal.

VIGOROUS prolific Italian queens, \$1.00 each; 6 for \$5.00. A. V. Small,  
2302 Agency Road, St. Joseph, Mo.

GOLDEN all-over Queens of Quality. Untested, 75c; tested, \$1.50. A. O. Heinzel, Rt. 3, Lincoln, Ill.

QUEENS of Moore's strain of Italians. Untested, \$1.00 each; 6 for \$5.00. Less in larger numbers. P. B. Ramer, Harmony, Minn.

FOR SALE—75 colonies of bees in 8 and 10 frame Standard Dovetailed L. hives. A No. 1 condition. J. F. Turpin, Carrollton, Mo.

FOR SALE—Untested Golden Italian queens 60c each. Hybrids, 30c. J. F. Michael, Winchester, Ind.

FOR SALE—Bright Italian queens at 55 cts. each, or \$6.00 per dozen. Safe arrival and satisfaction guaranteed. W. W. Talley, Rt. 4, Greenville, Ala.

GOLDENS that are golden. Untested, \$1.50. Tested, \$3.00 to \$20.00. Send for booklet. Geo. M. Steele,  
4527 Sansom St., Philadelphia, Pa.

ITALIAN and Carniolan Queens, the earliest and best to be had of either race. My circular and prices are free. Grant Anderson, San Benito, Tex.

ITALIAN QUEENS for sale this season at 60c each; \$7.00 per dozen. Ready April 15. Safe arrival guaranteed. T. J. Talley,  
Rt. 3, Greenville, Ala.

PLACE your order early to insure prompt service. Tested, \$1.25; untested, \$1.00. Italians and Goldens. John W. Pharr,  
Berclair, Tex.

QUIRIN's superior improved queens and bees are northern bred, and are hardy. Orders booked now. Over 20 years a breeder. Free circular. H. G. Quirin, Bellevue, Ohio.

MY FAMOUS BRIGHT ITALIAN QUEENS will be 55c each after July 1. Send for price list. Safe arrival and satisfaction guaranteed. M. Bates, Rt. 4, Greenville, Ala.

SUPERB Golden and 3-banded queens at \$1.00 for one; \$7.50 for 12; \$32 for 50; \$60 per 100. Bees in pound packages in season. Frank A. Leib, R. F. D. 7, San Jose, Calif.

A ONE POUND SWARM of bees with choice Italian queen, \$2.50; six for \$13. A splendid way to make increase cheaply with good stock. Untested Italian queens, 75c each; six, \$4.00; 25 for \$15. Order now. J. B. Hollopeter, Pentz, Pa.

ITALIAN QUEENS—Breeders, \$2.50, \$5.00; and \$10. Untested, \$1.00 each; six for \$5.00, \$9.00 per dozen. Doolittle & Clark,  
Marietta, N. Y.

ITALIAN BEES, 2 lbs. \$1.50, or with queen and frame of brood, \$2.50; black bees, 65c a pound. Free from disease. Fine fruit and pasture land, \$4.00 an acre. C. H. Cobb, Belleville, Ark.

FOR SALE—About 200 colonies in 10-frame hives; extractor and other necessities; in good climate and fair location. Write or come and see. M. B. Bailey, Agt.,  
Christine, Tex.

YOUNG blood brings profits. In your fall requeening try N. Mex. queens. They lay; they pay. For bees, queens and nuclei my prices will interest you. S. Mason, Hatch, N. Mex.

PURE ITALIAN QUEENS—Guaranteed; by return mail. One, \$1.00; 6, \$4.25; 12, \$8.00; 50, \$32; 100, \$60. Also bees by the pound, nuclei and full colonies. Please send for free circular. J. E. Wing,  
155 Schiele Ave., San Jose, Calif.

GOLDEN QUEENS that produce Golden Workers of the brightest kind. I will challenge the world on my Goldens and their honey-getting qualities. Price, \$1.00 each; Tested, \$2.00. Breeders, \$5.00 and \$10.00. 2 Atf J. B. Brockwell, Barnetts, Va.

ITALIAN QUEENS, also the Golden Beauties and Carniolans. Tested, \$1.00. Untested, 75c each. For bees by the pound and queens in lots write for prices. Page Bankston, Buffalo, Tex.

THE SECRET OF SUCCESS is in having your colonies headed by good prolific queens. We have good Italian queens at 75c for untested and \$1.00 for tested. G. W. Moon,  
1904 Adams St., Little Rock, Ark.

QUEENS, improved three-band Italians bred for business, June 1 to Nov. 15. Untested Queens, 75c each; dozen, \$8.00; Select, \$1.00 each; dozen, \$10. Tested Queens, \$1.25; dozen, \$12. Safe arrival and satisfaction guaranteed. H. C. Clemons, Boyd, Ky.

GOLDEN and 3-banded Italian and Carniolan queens, ready to ship after April 1st. Tested, \$1.00; 3 to 6, 95c each; 6 to 12 or more, 90c each. Untested, 75c each; 3 to 6, 70c each; 6 or more, 65c. Bees, per lb., \$1.50; Nuclei, per frame, \$1.50. C. B. Bankston, Buffalo, Leon Co., Tex.

THREE-BANDED Italian Queens ready April 1, of an exceptionally vigorous and long-lived strain of bees. They are gentle, prolific, and good honey gatherers. Untested, \$1.00; 3, \$2.50; 6, \$5.00; 12, \$8.00. Tested, \$1.25; 6, \$6.50; 12, \$12. Jno. G. Miller,  
723 So Carrizo St., Corpus Christi, Tex.

NOTICE—R. A. Shults will sell Italian queens in the season of 1915. Untested, \$1.00. After June 1, 75c; tested, \$1.50; select tested, \$2.00. Breeders, \$5.00. Bred from Moore and Doolittle stock. R. A. Shults,  
R. F. D. 3, Cosby, Tenn.

PHELPS' Golden Italian Queens combine the qualities you want. They are great honey gatherers, beautiful and gentle. Mated, \$1.00; six, \$5.00; Tested, \$3.00; Breeders, \$5.00 and \$10. C. W. Phelps & Son,  
3 Wilcox St., Binghamton, N. Y.

I CAN supply you with Golden or three-banded Italian queens. Tested, \$1.00 each; six or more, 85c each; untested, 75c each; six or more, 65c each. Bees, per pound, \$1.25. Nuclei per frame, \$1.25. Write for prices on large orders. Everything guaranteed. I. N. Bankston, Buffalo, Tex.

FOR SALE—Golden Italian queens that produce golden bees and good honey gatherers. Tested, \$1.00. Select tested, \$1.25. Untested, 60c; dozen, \$7.00. D. T. Gaster, Rt. 2, Randleman, N. C.

FOR SALE—Between 60 and 70 colonies of Italian bees on Hoffman frames in good condition and good location, in sunny southern Florida; a house 10x20 feet built in sections, household goods chickens, etc., at reasonable price. Bees make honey in winter. Reason for selling, too old. Address, P. O. Box 217, Fort Lauderdale, Fla.

# American Bee Journal

**GRAY CAUCASIANS**—Their superior qualities are early breeding; great honey gatherers; cap beautifully white; very prolific; very gentle; great comb builders; not much inclined to swarm; give better body to honey; not much inclined to rob; very hardy; never furious; good winterers; everywhere the best all-purposed bee. Give me a trial order for a queen or nucleus. Prices on application, J. J. Wilder, Cordele, Ga.

**FOR SALE**—Queens, three-band Italians. Extra good strain. Their bees are great hustlers. Only drones from selected queens near mating yard. Untested, one, \$1.00; 6 for \$4.50; 12, \$8.00. Ready June 15. When ordering, state time within which queens are wanted. They will be mailed promptly or money returned. D. G. Little, Hartley, Iowa.

**FOR SALE**—Three-banded Italian queens from the best honey-gathering strains, that are hardy and gentle. Untested queens, 75c; 6, \$4.25; 12, \$8.00. Tested queens, \$1.25; 6, \$7.00; 12, \$12. Selected queens, add 25c each to above prices. Breeding queens, \$3.00 to \$5.00 each. For queens in larger quantities, write for prices and circulars. Robert B. Spicer, Wharton, N. J.

## HONEY AND BEESWAX

**WANTED**—Comb, extracted honey, and beeswax. R. A. Burnett & Co., 6A12t 173 S. Water St., Chicago, Ill.

**FOR SALE**—Light extracted honey, 8c; amber, 7c; in ten case lots, 1/2c less; two 60 lb. cans to case. H. G. Quirin, Bellevue, Ohio.

**FOR SALE**—Raspberry, Basswood, No. 1 white comb, \$3.00 per case; fancy, 3.25; 24 Danz. sections to case; 6 to 9 cases to carrier. W. A. Latshaw Co., Clarion, Mich.

## FOR SALE

**WATCH** to trade for printing press. Dr. Bonney, Buck Grove, Iowa.

**FOR SALE**—I. H. C. Truck in fine condition and running order. Will sell at a bargain; have no use for it. Address, L. Werner, Edwardsville, Ill.

**FOR SALE**—In the famous Snake and Boise River valleys, surrounded by thousands of acres of alfalfa and sweet clover 500 colonies of bees; 105 honey crop supplies and equipment. Randall & Ross, Nampa, Idaho.

## HONEY LABELS

**HONEY LABELS** and Printing. Catalog free Liberty Pub. Co., Sta. D, Box 4H, Cleveland, O.

## SUPPLIES.

**FOR SALE**—Cedar or pine dovetailed hives, also full line of supplies including Dadant's foundation. Write for catalog. A. E. Burdick, Sunnyside, Wash.

**FOR SALE**—I am selling foundation and paying the freight to your station anywhere in La. Root's goods for sale. Send me your orders. Am paying 28c cash for wax or 30c in trade delivered here. J. F. Archdekin, Big Bend, La.

**FOR SALE**—Friction-top pails, 5-lb. size per 100, \$4.50; 10-lb. size, \$6.25 per 100; 60-lb. cans, two in a case, 10 cases or more, 6c; 25 cases, 5c; 50 cases or more, 5c per case. All f. o. b. Chicago. A. G. Woodman Co., Grand Rapids, Mich.

**STANDARD DOVETAILED HIVES** shipped direct from factory in Iowa. Fine 8 frame for \$6.00. Hoffman frames, \$2.75 per hundred. Plain sections, \$4.20 per M. Write for prices on what you need—a full line. Queens, 50c each. Write for large lots in July, August. The Stover Apiaries, Mayhew, Miss.

**BEE-KEEPER**, let us send our catalog of hives, smokers, foundation, veils, etc. They are nice and cheap. White Mfg. Co., Greenville, Tex. 4Atf

## WANTED

**WANTED** to hear from owner of good farm for sale. Send cash price and description. D. F. Bush, Minneapolis, Minn.

## NEW ENGLAND BEE KEEPERS

Everything in Supplies  
New Goods. Factory Prices.  
Save Freight and Express Charges  
CULL & WILLIAMS CO.,  
Providence, R. I.



## A Nice

1 pound package Italian bees with queen, \$1.25;  
2-fr. nuclei with queen, \$1.50. Shipped C. O. D.  
ROSEDALE APIARIES  
Big Bend, Louisiana

## ARCHDEKIN'S FINE ITALIAN QUEENS—3-BANDED



Persistent—Profitable—Production—of honey. That's what each of my queens stands for. Reared under most favorable conditions in an ideal location, they are beautiful to look at and wonderful honey gatherers. Safe arrival and satisfaction guaranteed. No disease. Untested, \$1.00 each; 6 for \$5.00; dozen, \$9.00. Special price in quantities. Root's goods for sale.

J. F. ARCHDEKIN, BIG BEND, LA.

## SUPPLIES AND BEES

If you need supplies or bees shipped promptly, write us. Our stock is complete. No delays. Chaff and single walled hives. Bees by the pound, nucleus or full colony. Untested queens, \$1.00. Tested, \$1.25. Catalog free.

I. J. STRINGHAM

105 Park Place, New York

APIARIES: Glen Cove, L. I.

# HONEY WANTED

We will need several carloads of extracted honey. In offering your honey, be sure to send sample that will show true body, color and flavor. Also quote your lowest price, f. o. b., your shipping point in your first letter, and state when gathered.

All honey should be in new cans and cases, properly marked and graded according to standard rules. Best grades will have preference. All cans must contain 60 lbs. net.

**DADANT & SONS, Hamilton, Ill.**

## TENNESSEE-BRED QUEENS

43 Years' Experience in Queen Rearing—Breed 3-Band Italians Only

Nov 1 to May 1				May 1 to June 1				June 1 to July 1				July 1 to Nov. 1			
I	6	I2		I	6	I2		I	6	I2		I	6	I2	
Untested.....	\$1.50	\$7.50	\$13.50	\$1.25	\$6.50	\$11.50		\$1.00	\$5.00	\$9.00		\$.75	\$4.00	\$7.50	
Select Untested	2.00	8.50	15.00	1.50	7.50	13.50		1.25	6.50	12.00		1.00	5.00	9.00	
Tested.....	2.50	13.50	25.00	2.00	10.50	18.50		1.75	9.00	17.00		1.50	8.00	15.00	
Select Tested..	3.00	16.50	30.00	2.75	15.00	27.00		2.50	13.50	25.00		2.00	10.00	18.00	

Bees by the pound, 1 lb., \$1.25; 2 lb., \$2.25; 3 lb., \$2.75.

Nuclei (no queen) 1 fr. \$1.50; 2 fr., \$2.15; 3 fr. \$2.75; 4 fr., \$3.50; pure 3-band Italians.

Select queen wanted, add price.

Capacity of yard, 5000 queens a year—Select queen tested for breeding, \$5.00  
The very best queen tested for breeding, \$10

Queens for export will be carefully packed in long distance cages, but safe delivery is not guaranteed.

**JOHN M. DAVIS, SPRING HILL, TENN.**



# American Bee Journal

## J. W. K. SHAW & CO.

Are still filling orders for queens by **return mail**. Their strain of three-banded Italians is well known. The industry and gentleness of bees, and size and prolificness of queens, show the care taken in breeding. Never a case of foulbrood among these bees. Their apiary was established in 1886.

Tested queens, \$1.00. Untested queens, 75c; \$7.00 per dozen. Also bees by the pound, 1, 2 and 3 frame nuclei.

J. W. K. SHAW & CO., Loreauville, La.

## We Have Decided

Not to change the prices for 1915, and will not mail new catalogs to our customers unless we are requested. Order from last catalog. Send us list of goods wanted for best prices. No one can beat us. We have been in business since 1899. Reference, any mercantile agency.

H. S. DUBY & SON, St. Anne, Ill.

## HONEY AND BEESWAX

CHICAGO, July 17.—At this writing we have no arrivals of white comb honey of the new crop from surrounding country, but the southern States have sent in more or less comb honey, which has sold at from 12½¢ to 18¢ per pound, according to color, flavor and appearance. The demand has practically been confined to the best grades, as is always the case at this time of the year.

More or less extracted honey is offered, but meets with very little demand. None of the larger buyers are on the market; therefore, prices are without change from recent quotations with quite a quantity carried over of the yield of 1914.

Beeswax is steady and good sale at from 30¢ to 32¢ per pound, according to color and cleanliness.

R. A. BURNETT & Co.

INDIANAPOLIS, July 16.—There is an increasing demand for honey, especially comb, but at this writing the market is practically bare. New crop has not arrived yet. Best grades of extracted in 60-pound cans sell for 10¢ to 12¢. No. 1 choice white comb is bringing \$1.00 per case. For beeswax we offer 28¢ cash or 30¢ in exchange for bee supplies.

WALTER S. POWDER.

DENVER, July 19.—No new comb honey available yet. We quote first-class extracted honey at the following local jobbing prices: White, 8½¢ to 8¾¢; light amber, 8¢ to 8¼¢; amber, 7¢ to 8¢. We buy beeswax all times, and offer at present 28¢ per pound in cash and 29¢ per pound in trade for clean yellow beeswax delivered here.

THE COLO. HONEY-PRODUCERS' ASS'N.  
Frank Rauchfuss, Mgr.

KANSAS CITY, MO., July 17.—The receipts of new comb honey are more liberal now, and the demand is good. The supply of extracted honey is large, but the demand is light. We quote: No. 1 white comb honey, 24 section cases, \$3.50 to \$3.75; No. 2, \$3.00 to \$3.25. No. 1 amber, 3.25 to \$3.50; No. 2, \$2.75 to \$3.00. Extracted, white, per pound, 7½¢; amber, 6¢ to 7¢. Beeswax, No. 1, 28¢; No. 2, 25¢.

C. C. CLEMONS PRODUCE COMPANY.

CINCINNATI, July 17.—Business is not good in the honey line, although the demand is looking up somewhat. We quote No. 1 comb honey at \$1.75 to \$4.00 per case, and extracted amber at 5½¢ to 7¢, and white from 8¢ to 10¢ a pound. We are paying 28¢ a pound cash for beeswax or 30¢ a pound in trade.

THE FRED W. MUTH CO.

LOS ANGELES, July 18.—The market on California honey at present is about as follows: Comb, white, \$3.00 per case; light amber, \$2.75. Stocks ample for present requirements. Extracted, light amber alfalfa, 3¼¢ per pound; light amber sage, 4¼¢ per pound; water-white sage, 7¢; white orange, 7¢ (new crop). Beeswax, 28¢. All f. o. b. Coast.

HAMILTON & MENDERSON.

NEW YORK, July 19.—There is nothing new to report in regard to comb honey. Some stock has been carried over from last year which kept in very good condition, and as the season will open for new crop within the next month or so, there will be no trouble in disposing of it. There is no demand

at present, to speak of, but in another month from now, the season will open and we expect a fairly good demand. We cannot tell as yet what the crop will be in the East or middle West, and it will depend on the weather during the next three or four weeks. There are no prices established as yet, and there will not be for some time to come.

Extracted honey is in fair demand, and from correspondence we are receiving right along, it is evident that a good crop has been produced throughout the South, as well as in California and the far West.

West Indian honey is also arriving freely. We quote nominal: California and far western, 5½¢ to 7¢ per pound, according to quality; southern, average grade, 50¢ to 55¢ per gallon; fancy grades, 65¢ to 75¢ per gallon. West Indian, 45¢ to 55¢ per gallon, according to quality.

HILDRETH & SEGELKEN.

## Grading Rules of the Colorado Honey- Producers' Association, Denver, Colo., Adopted Feb. 6, 1915.

(All honey sold through the Colorado Honey-  
Producers' Association must be graded by these rules.)

### COMB HONEY.

FANCY.—Sections to be well filled, combs firmly attached on all sides and evenly capped, except the outside row next to the wood. Honey, comb and cappings white, or slightly off color. Combs not projecting beyond the wood, sections to be well cleaned. No section in this grade to weigh less than 12½ ounces net or 13½ ounces gross. The top of each section in this grade must be stamped, "Net weight not less than 12½ ounces."

The front sections in each case must be of uniform color and finish, and shall be a true representation of the contents of the case.

No. 1.—Sections to be well filled, combs firmly attached, not projecting beyond the wood and entirely capped, except the outside row next to the wood. Honey, comb and cappings from white to light amber in color. Sections to be cleaned. No section in this grade to weigh less than 11 ounces net or 12 ounces gross. The top of each section in this grade must be stamped, "Net weight not less than 11 ounces." The front sections in each case must be of uniform color and finish, and shall be a true representation of the contents of the case.

No. 2.—This grade is composed of sections that are entirely capped except row next to the wood, weighing not less than 10 ounces net or 11 ounces gross. Also of such sections that weigh 11 ounces net or 12 ounces gross, or more, and have not more than 50 uncapped cells altogether, which must be filled with honey. Honey, comb and cappings from white to amber in color. Sections to be well cleaned. The top of each section in this grade must be stamped, "Net weight not less than 10 ounces." The front sections in each case must be of uniform color and finish, and shall be a true representation of the contents of the case.

## COMB HONEY THAT IS NOT PERMITTED IN SHIPPING GRADES.

Honey packed in second hand cases.  
Honey in badly stained or mildewed sections.

Honey showing signs of granulation.  
Leaking, injured or patched up sections.  
Sections containing honey-dew.  
Sections with more than 50 uncapped cells or a less number of empty cells.  
Sections weighing less than the minimum weight.

All of such honey should be disposed of in the home market.

### EXTRACTED HONEY

Must be thoroughly ripened, weighing not less than 12 pounds per gallon. It must be well strained and packed in new cans, 60 pounds shall be packed in each 5 gallon can, and the top of each 5-gallon can shall be stamped or labeled, "Net weight not less than 60 pounds."

Extracted honey is classed as white, light amber and amber, the letters "W," "L. A.," "A." should be used in designating color, and these letters should be stamped on top of each can. Extracted honey for shipping must be packed in new, substantial cases of proper size.

### STRAINED HONEY

Must be well ripened, weighing not less than 12 pounds per gallon. It must be well strained, and if packed in 5-gallon cans each can shall contain 60 pounds. The top of each 5-gallon can shall be stamped or labeled "Net weight not less than 60 pounds." Bright clean cans that previously contained honey may be used for strained honey.

## HONEY NOT PERMITTED IN SHIPPING GRADES.

Extracted honey packed in second-hand cans.

Unripe or fermenting honey, weighing less than 12 pounds per gallon.

Honey contaminated by excessive use of smoke.

Honey contaminated by honey-dew.  
Honey not properly strained.

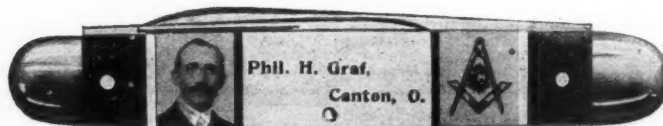
## Help Advertise Honey

—By putting—

# EAT HONEY

Stickers on all letters, packages, shipments, etc. Printed in bright red, already gummed. Price, postpaid, 500, 20¢; 1000, 30¢.

## BEE - KEEPER'S NOVELTY POCKET - KNIFE



Your Name and Address will be put on one side of the handle as shown in the cut, and on the other side a picture of a Queen-Bee, a Worker-Bee, and a Drone-Bee. The handle is celluloid, and transparent, through which is seen your name. If you lose this Knife it can be returned to you, or it serves to identify you if you happen to be injured fatally, or rendered unconscious. The cut is the exact size. We have succeeded in getting this knife made in lots from genuine car-van steel. It is especially well tempered and keeps its edge remarkably. When ordering be sure to write exact name and address. Knife delivered within two weeks after we receive order.

Price, postpaid, \$1.00; or with a year's subscription to the American Bee Journal—both for \$1.80; or given FREE as a premium for sending us 3 New subscriptions at \$1.00 each.

American Bee Journal, Hamilton, Illinois.



## NOW IS THE TIME TO REQUEEN

Now is the time to get ready for next year. If you are just taking off a big crop of honey, your queens will be more or less worn out by their enormous egg production, and will profit by being replaced in many instances.

Possibly you look for a big crop next year. Now is the time, then, to weed out your poor stock, your black stock, or your older queens. You should have young and vigorous queens to start the season next year.

Under any circumstances, weed out your poor stock.

We are in a position to furnish pure stock, either leather colored, three-band, or golden, as you prefer, in very short order and at reasonable prices, and guarantee safe arrival and pure stock.

Our prices for the balance of the season are as follows:

### Pure Italian Stock

1 Untested	\$ 1.00
6 "	4.50
12 "	8.50
25 "	16.50

Tested queens, \$1.50 each.

Prices on larger lots on application.

### Caucasian Queens

There is a growing demand for queens of this race of bees. We are prepared to furnish these queens at the same prices as above in lots of six or less.

Write at once with order and remittance and state approximate date upon which you wish queens to arrive.

**AMERICAN  
BEE JOURNAL**  
**Hamilton,  
Illinois**

## BARNES' Foot-Power Machinery



Read what J. I. Parent of Chariton, N. Y., says: "We cut with one of your Combined Machines last winter 50 chaff hives with 7-in. cap, 100 honey-racks, 500 frames, and a great deal of other work. This winter we have a double amount of hives, etc. to make with this saw. It will do all you say of it." Catalog & price-list free

**W. F. & JOHN BARNES**  
205 Ruby St., ROCKFORD, ILLINOIS.

## DON'T DELAY

Sending in your order for bees or queens. One pound bees with choice young Italian queen and directions how to build up to one or more colonies by fall, \$2.50; six for \$13.

Choice Italian queens, untested, 75c each; six, \$4.00; 25 for \$15. Bees and Queens my specialty. Satisfaction guaranteed.

**J. B. HOLLOPETER, Box 256, Pentz, Pa.**

### Fine Italian Queens

Select 3 and 5 banded stock; gentle, hardy and prolific honey gatherers. No disease. Price, 1 to 3, \$1.00 each; 4 to 6, 90c each. Larger quantity, \$10 per doz. Prompt deliveries. Pure mates. Safe arrival and absolute satisfaction guaranteed. Send me a trial order.

**CHAS. M. DARROW**  
Star Route, - Milo, Mo.

OUR VERY BEST IS THE VERY BEST

## BEE SUPPLIES

Best Sections, Best Shipping Cases  
Best of all Supplies

Best prices you will get for your honey when put up in our sections and shipping cases. "LOTZ" sections and shipping cases have stood the test. Why? Because they are perfect in workmanship, quality and material. Buy LOTZ goods when you want the BEST. Our 1915 catalog ready now. Send your name and get one.

H. S. DUBY & SON, St. Anne, Ill., carry a full line of our goods.

**AUG. LOTZ CO. BOYD, WIS.**

## QUEENS OF QUALITY

### THREE BANDED ITALIANS

First class untested queens remainder of the season, 60 cts. each; \$7.00 per dozen. Satisfaction guaranteed.

**J. I. BANKS, DOWELLTOWN, TENN.**

## MARZ STRAIN OF ITALIANS

A distinctive strain of honey gatherers, with fixed characteristics, the result of 25 years careful breeding.

Untested queens.....\$ 1.00  
Tested queens..... 2.00  
Breeding queens..... 10.00

Write for circular.

**WALKER & MARZIAN APIARIES**  
Box 373, New Albany, Indiana

**WESTERN BEE-KEEPERS** can save get the best goods obtainable, especially made to meet Western condition. Send for new catalog and special price list to  
**Colorado Honey-Producers' Association**  
Denver, Colorado

# American Bee Journal

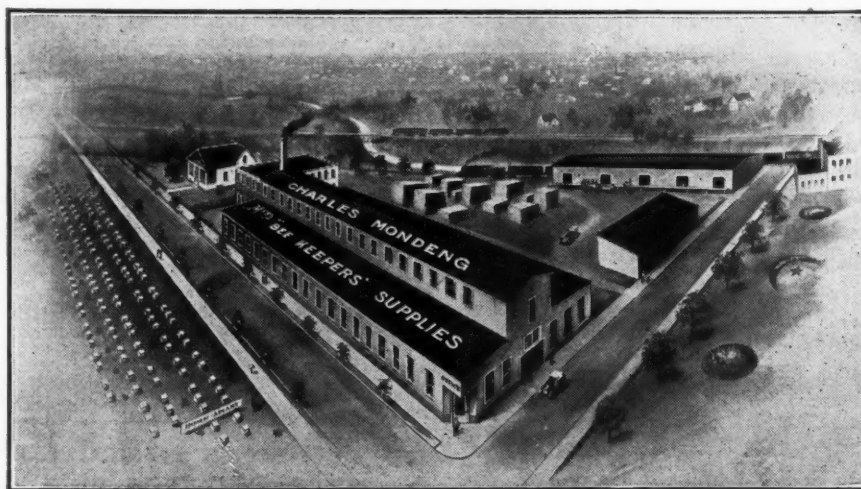


## "NUTMEG QUEENS"

**BY RETURN MAIL**

Leathered-colored Italians. Hardy, northern reared. Up-to-date methods. Until June 1, tested, \$2.00. After \$1.50. Untested, \$1.00; 12 for \$10. Large orders a specialty.

**A. W. YATES 3 Chapman St. HARTFORD, CONN.**



## MILLIONS OF Fine Sections

Thousands of Hives, the best ever made of white pine lumber, ready for prompt shipment. Don't miss them. My goods are guaranteed. A trial order will prove it. 200 colonies of Adels and Carniolans. If you want a square deal, send for my Catalog and Price List. I will pay highest market price for Beeswax in trade.

**CHARLES MONDENG**  
146 Newton Ave. North  
Minneapolis, Minnesota

## Three Carloads of Bees

We are now in a position to take care of any and all orders for Bees, having recently received one carload of Bees from our Virginia apiary and another from Texas, while a third carload is now on the way. These are fully up to our usual standard; in fact, we consider them the finest stock of Italian bees that we have ever received. One of our friends in Canada writes us as follows:

AYLMER, ONT., May 25, 1915.  
R. H. LINDSAY.

You advised me to start four years ago, at sixty years of age; have over eighty colonies in modern ten-frame hives, and many beautiful Italians from stock purchased through O. B. A. from your firm.

While from Mississippi comes this testimonial;

BAY ST. LOUIS, MISS.

THE A. I. ROOT COMPANY, Medina, Ohio—

Dear Sirs:—The five-frame nucleus I received last week arrived in fine shape and working fine. They are the gentlest bees I have ever handled. Do not need any smoker or veil with them. Thanking you for prompt shipment.

I beg to remain, yours truly,

C. F. CARPENTER.

Italian bees in 1-lb. package, \$2.00; 2 lbs., \$3.25; 3 lbs., \$4.00.

One frame nucleus without queen, \$2.00; 2 frame, \$3.00; 3 frame, \$3.50; 5 frame, \$4.50,

Colony in 8 frame dovetailed hive, no queen, \$8.50.

Colony in 10 frame dovetailed hive, no queen, \$9.00.

Untested Italian queen for any of the above, \$1.00.

Tested " " " " " " 2.00.

**THE A. I. ROOT COMPANY,      Executive Offices and Factory,      MEDINA, OHIO**  
—Branch Offices—

New York, 139-141 Franklin St.  
Philadelphia, 8-10 Vine St.  
Chicago, 215 West Ohio St.  
St. Paul, 850 Payne Ave.

San Francisco, 58 Sutter St.  
Des Moines, 915-917 Walnut St.  
Syracuse, 1631 West Genesee St.  
Indianapolis, 859 Massachusetts Ave.

Zanesville, Ohio.  
Mechanic Falls, Maine.  
Washington, 1100 Maryland Ave., S. W.  
Los Angeles, Calif., 948 E. Second St.



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# MARSHFIELD GOODS

## BEE KEEPERS :—

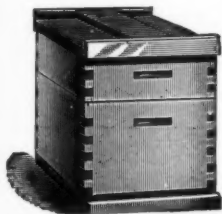
We manufacture Millions of **Sections** every year that are as good as the best. **The CHEAPEST** for the Quality; **BEST** for the Price. If you buy them once, you will buy again.

We also manufacture **Hives, Brood-Frames, Section-Holders and Shipping-Cases.**

Our Catalog is free for the asking.

**Marshfield Mfg. Co.,**

**Marshfield, Wis.**



## EARLY ORDER DISCOUNTS WILL Pay You to Buy Bee Supplies Now

30 years' experience in making everything for the beekeeper. A large factory specially equipped for the purpose ensures goods of highest quality. Write for our illustrated catalog today.

**LEAHY MFG. CO., 90 Sixth St., Higginsville, Missouri**

# START THE SEASON RIGHT

By using **Dittmer Foundation** the bees like it for it's made to just suit them, and is just like the Natural Comb they make themselves.

Send for prices on having your Beeswax made into Comb Foundation, which includes all freight charges being paid.

**All other Supplies in stock**

**Gus Dittmer Company, Augusta, Wisconsin**

## THE TRUTH ABOUT FLORIDA

To learn the truth about a country you want to read the agricultural paper which the growers of that country read, and **THE FLORIDA GROWER**, published at Tampa, Florida, is Florida's one agricultural weekly. It is unique in the agricultural field. It carries more advertising than any agricultural paper in the country; it has a more interested body of readers; it is instructive and entertaining. Sample copy free or 50 cents for a four months' trial subscription. 50 cents back if not satisfied.

**THE FLORIDA GROWER**  
Box A-B, Tampa, Florida

**FREEMAN'S FARM** North Yakima, Wash.  
Successor to Northwest Farm and Home  
69 YEARS OLD

If you want a descriptive and agricultural magazine, it will inform you all about the methods in the Pacific Northwest. Send One dollar and have the magazine sent for one year. Cut rate of one-half price now on.

## Beekeepers' Supplies

Such as Winter Cases, Hives, Sections, Covers, Bottoms, Bodies, Supers, Brood-frames of every description. Shipping-cases, Section-holders, Comb-foundation, Smokers, etc.

Get my prices before placing your orders.

**R. H. SCHMIDT**  
Rt. 3, Box 209, Sheboygan, Wis.

## QUINN'S QUEENS OF QUALITY

Not coming, but are here to stay. Best bee for any climate; purest of the pure.

## GREY CAUCASIANS

Bred strictly in the light of **Mendel's Laws of Heredity**; no guess, but positive results. The pioneer scientific queen-rearing establishment of America. We lead, others may follow. Every queen guaranteed as to purity of mating.

Special isolated mating station on bald open prairie, not a tree within miles—no chance for gypsy drones.

**CHAS. W. QUINN**  
609 W. 17th Ave., Houston Heights, Texas

## TRY MY FAMOUS QUEENS

From Improved Stock

The best that money can buy; not inclined to swarm, and as for honey gatherers they have few equals.

**3-Band Golden, 5-Band and Carniolan**

bred in separate yards, ready March 20. Untested, 1, \$1.00; 6, \$5.00; 12, \$10.00; 25, \$17.50; 50, \$34; 100, \$65. Tested, 1, \$1.50; 6, \$8.00; 12, \$15.00. Breeders of either strain, \$5.00. Nuclei with untested queen, 1-frame, \$2.50; six 1-frame, \$15.00; 2 frame, \$4.50; six 2-frame, \$20.40; nuclei with tested queen, 1-frame, \$3.00; six 1-frame, \$17.40; 2 frame, \$1.00; six 2-frame, \$23.40. Our Queens and Drones are all reared from the best select queens, which should be so with drones as well as queens. No disease of any kind in this country. Safe arrival, satisfaction and prompt service guaranteed.

**D. E. BROTHERS, Attalla, Ala.**

# Make Hay While the Sun is Shining

Gather your honey crop while there is a chance. If you are in need of supers, sections, comb foundation, frames, etc., write or wire us, and we will send your order out the same day.

We carry a large stock, and can fill any and all orders at once and without delay. **Root's Goods** are synonymous with perfect workmanship, the best of raw materials, and **Weber Service** means attention to details and prompt shipments. Save freight. Order from us.

**C. H. W. WEBER & CO.,**  
2146 Central Avenue, Cincinnati, Ohio

## DADANT'S FOUNDATION

DADANT'S FOUNDATION

DADANT'S FOUNDATION

### Rendering Combs

Cappings or slumgum is a "mussy" job at best. We are equipped for this work, and will render yours for you on shares. Send for our terms. For your share of the wax we will either pay you cash, ship you goods in exchange or manufacture it into

### Dadant's Foundation

Known and liked the world over because it is just like the combs the bees make themselves.

### Bee Supplies

We carry a large stock of all kinds of bee supplies. Drop us a card, making known your wants. We guarantee satisfaction in every way.

**DADANT & SONS,**  
HAMILTON, ILLINOIS.